

=> fil hcplus
FILE 'HCPLUS' ENTERED AT 10:44:00 ON 08 SEP 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 8 Sep 2009 VOL 151 ISS 11
FILE LAST UPDATED: 7 Sep 2009 (20090907/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

HCplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> d 180 bib abs hitind hitstr tot

L80 ANSWER 1 OF 23 HCPLUS COPYRIGHT 2009 ACS on STN
AN 2004:681491 HCPLUS Full-text
DN 141:194942
TI Preparation of polyamino and/or polyammonium-polysiloxane copolymers and use in hair preparations
IN Lange, Horst; Wagner, Roland; Kropfgans, Martin; Musiol, Sabine
PA GE Bayer Silicones GmbH & Co. KG, Germany
SO PCT Int. Appl., 116 PP.
CODEN: PIXXD2

DT Patent
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004069137	A2	20040819	WO 2004-EP50091	20040206 <--
	WO 2004069137	A3	20041021		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,				

LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
 BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
 MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
 GQ, GW, ML, MR, NE, SN, TD, TG

DE 10304923 A1 20040826 DE 2003-10304923 20030207 <--
 PRAI DE 2003-10304923 A 20030207 <--
 DE 2003-10333375 A 20030723 <--

AB The invention relates to the use of linear or cross-linked polyamino and/or polyammonium-polysiloxane copolymers comprising repeater units of formula: -[Q-VI]- in the production and/or treatment of dyed hair in addition to compns. for the production and/or treatment of dyed hair. The copolymers are used before, during or after hair dying; also hair gels, styling products, and sprays are prepared. Thus PARI was prepared from N,N, N',N'-tetramethyl-1,6-hexane diamine and Jeffamin EB 600 and stored as an aqueous emulsion. A 43.5% of the prepared silicone-containing composition was used in a hair shampoo as a 4.6 weight/weight% component; other ingredients were (weight/weight%): ammonium lauryl sulfate (26%) 24; ammonium laureth sulfate (28%) 14.3; cocoamidopropyl betaine (35%) 11.43; polyquaternium-10 0.5%; water 54.17.

IC ICM A61K

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT 608530-63-8P 609340-85-4P 740815-32-1P 740839-04-7P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of polyamino and/or polyammonium-polysiloxane copolymers and use in hair preps.)

IT 740815-32-1P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of polyamino and/or polyammonium-polysiloxane copolymers and use in hair preps.)

RN 740815-32-1 HCPLUS

CN Acetic acid, chloro-, oxydi-2,1-ethanediyl ester, polymer with α -(dimethyl[3-(oxiranylmethoxy)propyl]silyl)- ω -[(dimethyl[3-(oxiranylmethoxy)propyl]silyl)oxy]poly[oxy(dimethylsilylene)] and N,N,N',N'-tetramethyl-1,6-hexanediamine, dodecanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 143-07-7

CMF C12 H24 O2

HO₂C—(CH₂)₁₀—Me

CM 2

CRN 398133-61-4

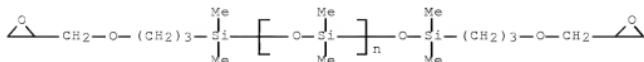
CMF (C10 H24 N2 . C8 H12 C12 O5 . (C2 H6 O Si)n C16 H34 O5 Si2)x
 CCI PMS

CM 3

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS



CM 4

CRN 111-18-2
CMF C10 H24 N2

Me2N-(CH2)6-NMe2

CM 5

CRN 106-78-5
CMF C8 H12 Cl2 O5

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 2 OF 23 HCPLUS COPYRIGHT 2009 ACS on STN
 AN 2004:567310 HCPLUS [Full-text](#)
 DN 142:43373
 TI Study on emulsification and conditioning properties of polyether-modified silicone contained quaternary ammonium and its application in shampoo
 AU Cheng, Jianhua; Wang, Xiaojun; Hu, Yongyou; Zhou, Wei
 CS College of Paper and Environment Engineering, South China University of Technology, Guangzhou, 510641, Peop. Rep. China
 SO Xiangliao Xiangjing Huazhuangpin (2003), (6), 14-16
 CODEN: XXHIAZ; ISSN: 1000-4475
 PB Xiangliao Xiangjing Huazhuangpin Bianjibu
 DT Journal
 LA Chinese
 AB The polyether-modified silicone contained quaternary ammonium was a new kind of cationic surfactant. The emulsification and the effect of hair dry and wet conditioning were measured. The result showed that the particle size of emulsion was about 10 μm ; the wet conditioning effect was improved by 28.0%, and the dry conditioning effect was improved by 21.2% when adding 2.0% of the title compound to the shampoo. Thus, the title compound was better than unmodified silicone emulsion.
 CC 62-3 (Essential Oils and Cosmetics)

ST polyether silicone quaternary ammonium emulsification conditioning shampoo

IT Shampoos
(conditioning; emulsification and conditioning properties of polyether-modified silicone contained quaternary ammonium and its application in shampoo)

IT Emulsification
Particle size
(emulsification and conditioning properties of polyether-modified silicone contained quaternary ammonium and its application in shampoo)

IT Quaternary ammonium compounds, biological studies
RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)
(emulsification and conditioning properties of polyether-modified silicone contained quaternary ammonium and its application in shampoo)

IT Polysiloxanes, biological studies
RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)
(polyether-; emulsification and conditioning properties of polyether-modified silicone contained quaternary ammonium and its application in shampoo)

IT Polyethers, biological studies
RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)
(siloxane-; emulsification and conditioning properties of polyether-modified silicone contained quaternary ammonium and its application in shampoo)

L80 ANSWER 3 OF 23 HCPLUS COPYRIGHT 2009 ACS on STN
AN 2004:453426 HCPLUS Full-text
DN 141:25051
TI Preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for treatment of substrate surfaces
IN Lange, Horst; Roos, Christopher; Wagner, Roland; Kropfgans, Martin; Graydon, Andrew Russell; Hartshorn, Richard Timothy; Boutique, Jean-Pol; Delplanque, Patrick Firmin August; Johnston, James Pyott
PA GE Bayer Silicones GmbH & Co. Kg, Germany
SO PCT Int. Appl., 86 pp.
CODEN: PIXXD2

DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI WO 2004046452	A2	20040603	WO 2003-EP50772	20031031 <--
WO 2004046452	A3	20040701		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,			

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2504914	A1	20040603	CA 2003-2504914	20031031 <--
AU 2003302035	A1	20040615	AU 2003-302035	20031031 <--
EP 1560973	A2	20050810	EP 2003-811391	20031031 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IB, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003015997	A	20050920	BR 2003-15997	20031031 <--
CN 1735729	A	20060215	CN 2003-80108247	20031031 <--
JP 2006050716	T	20060216	JP 2004-552711	20031031 <--
MX 2005004750	A	20050802	MX 2005-4750	20050503 <--
US 20060163524	A1	20060727	US 2006-533746	20060320 <--
PRAI DE 2002-10251525	A	20021104	<--	
WO 2003-EP50772	W	20031031	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates to surface treatment formulations containing at least one nitrogen-free polysiloxane compound, at least one polyamino polysiloxane and/or polyammonium polysiloxane compound, and/or at least one amino polysiloxane and/or ammonium polysiloxane compound, and an optional silicone-free cationic surfactant, a coacervate phase-forming agent, and carrier substances. The patent also relates to the preparation of polyamino polysiloxane and/or polyammonium polysiloxane compound for the formulations. Also disclosed are the inventive formulations and the use thereof for treating natural and synthetic fibrous materials, for cosmetic formulations and as softener. Thus, a title formulation comprising an ammonium polysiloxane prepared by the reaction of epoxysiloxane with N,N,N',N'-tetramethyl-1,6-hexamidine, and Jeffamin EDE600 in presence of dodecanoic acid was formulated with polydimethylsiloxane, an amino-polysiloxane of this invention and water for comparison with com. detergent.

IC ICM D06M0015-643
ICS D06M0013-463; A61K0007-06; C11D0003-37; D21H0017-59; D21H0017-07;
C08L0083-02

CC 40-9 (Textiles and Fibers)
Section cross-reference(s): 37, 46

ST fiber treatment formulation ammonium compd polysiloxane deriv
surfactant

IT Polyelectrolytes
Surfactants
(cationic; preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT Aggregates
(coacervates; preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT Polysiloxanes, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(epoxy; in preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT Resins
RL: TEM (Technical or engineered material use); USES (Uses)
(guaiacum, cationic; preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT Epoxy resins, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(polysiloxane-; in preparation of quaternary ammonium derivative of polysiloxanes and formulations

therefrom for fiber surface treatment)

IT Cosmetics
(preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for applications)

IT Fabric softeners
Surface treatment
(preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT Polysiloxanes, uses
Quaternary ammonium compounds, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT 31900-57-9DP, Poly(dimethylsilanediol), derivative with tetracyclodimethylsiloxane, aminopropylmethyldiethoxysilane, aminopropyldimethylmethylethoxysilane, hexamethyldisiloxane
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(assumed monomers; preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT 79-04-9, Chloroacetic acid chloride 109-55-7,
N,N-Dimethyl-1,3-propanediamine 112-35-6, Triethylene glycol monomethyl ether 112-67-4, Palmitoyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT 151190-60-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of quaternary ammonium derivative and formulations therefrom for fiber surface treatment)

IT 107-46-0DP, Hexamethyldisiloxane, derivative with tetracyclodimethylsiloxane, poly(dimethylsilanediol), aminopropylmethyldiethoxysilane, aminopropyldimethylmethylethoxysilane 109-01-3DP, N-Methylpiperazine, reaction product with epoxysiloxane and triethylene glycol monomethyl ether chloroacetate 111-18-2DP,
N,N,N',N'-Tetramethyl-1,6-hexanediamine, reaction product with epoxysiloxane, Jeffamin ED600, salt with dodecanoic acid 143-07-7DP, Dodecanoic acid, salt with reaction product of epoxysiloxane, N,N,N',N'-Tetramethyl-1,6-hexanediamine, and Jeffamin ED600 556-67-2DP, Cyclotetrasiloxane, octamethyl-, derivative with poly(dimethylsilanediol), aminopropylmethyldiethoxysilane, aminopropyldimethylmethylethoxysilane, hexamethyldisiloxane 3179-76-8DP, Aminopropylmethyldiethoxysilane, derivative with tetracyclodimethylsiloxane, poly(dimethylsilanediol), aminopropyldimethylmethylethoxysilane, hexamethyldisiloxane 9046-10-0DP, Jeffamin ED600, reaction product with epoxysiloxane , N,N,N',N'-Tetramethyl-1,6-hexanediamine, salt with dodecanoic acid 18306-79-1DP, derivative with tetracyclodimethylsiloxane, poly(dimethylsilanediol), aminopropylmethyldiethoxysilane, hexamethyldisiloxane 90948-78-0DP, reaction product with epoxysiloxane and N-methylpiperazin
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT 9016-00-6, Polydimethylsiloxane

RL: TEM (Technical or engineered material use); USES (Uses)
(preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

IT 31900-57-9DP, Poly(dimethylsilanediol), derivative with tetracyclodimethylsiloxane, aminopropylmethyldiethoxysilane, aminopropylmethylethoxysilane, hexamethyldisiloxane
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(assumed monomers; preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

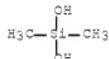
RN 31900-57-9 HCPLUS

CN Silanediol, 1,1-dimethyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 1066-42-8

CMF C2 H8 O2 Si



IT 109-55-7, N,N-Dimethyl-1,3-propanediamine

RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

RN 109-55-7 HCPLUS

CN 1,3-Propanediamine, N1,N1-dimethyl- (CA INDEX NAME)



IT 107-46-0DP, Hexamethyldisiloxane, derivative with tetracyclodimethylsiloxane, poly(dimethylsilanediol), aminopropylmethyldiethoxysilane, aminopropylmethylethoxysilane 109-01-3DP, N-Methylpiperazine, reaction product with epoxysiloxane and triethylene glycol monomethyl ether chloroacetate 111-18-2DP, N,N,N',N'-Tetramethyl-1,6-hexanediamine, reaction product with epoxysiloxane, Jeffaminc ED600, salt with dodecanoic acid
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of quaternary ammonium derivative of polysiloxanes and formulations therefrom for fiber surface treatment)

RN 107-46-0 HCPLUS

CN Disiloxane, 1,1,1,3,3,3-hexamethyl- (CA INDEX NAME)



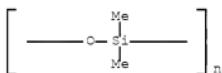
RN 109-01-3 HCAPLUS
 CN Piperazine, 1-methyl- (CA INDEX NAME)



RN 111-18-2 HCAPLUS
 CN 1,6-Hexanediamine, N1,N1,N6,N6-tetramethyl- (CA INDEX NAME)



IT 9016-00-6, Polydimethylsiloxane
 RL: TEM (Technical or engineered material use); USES (Uses)
 (preparation of quaternary ammonium derivative of
 polysiloxanes and formulations therefrom for fiber surface
 treatment)
 RN 9016-00-6 HCAPLUS
 CN Poly{oxy(dimethylsilylene)} (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 4 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 2004:413124 HCAPLUS Full-text
 DN 140:408676
 TI Linear polyamino and/or polyammonium polysiloxane copolymers.
 IN Lange, Horst; Witossek, Anita; Wagner, Poland; Stachulla, Karl-Heinz;
 Graydon, Andrew Russell; Hartshorn, Richard Timothy; Boutique, Jean-Pol;
 Deliplanque, Patrick Firmin August; Johnston, James Pyott; Sockel,
 Karl-Heinz
 PA GE Bayer Silicones GmbH & Co. KG, Germany
 SO PCT Int. Appl., 61 pp.
 CODEN: PIXXD2
 DT Patent

LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004042136	A1	20040521	WO 2003-EP50773	20031031 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2504981	A1	20040521	CA 2003-2504981	20031031 <--
AU 2003301831	A1	20040607	AU 2003-301831	20031031 <--
EP 1563136	A1	20050817	EP 2003-810454	20031031 <--
EP 1563136	B1	20080514		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003015973	A	20050927	BR 2003-15973	20031031 <--
CN 1735728	A	20060215	CN 2003-80108232	20031031 <--
JP 2006505643	T	20060216	JP 2004-549174	20031031 <--
AT 395458	T	20080515	AT 2003-810454	20031031 <--
ES 2308036	T3	20081201	ES 2003-810454	20031031 <--
MX 2005004751	A	20050803	MX 2005-4751	20050503 <--
US 20060235181	A1	20061019	US 2006-533837	20060320 <--
US 7563856	B2	20090721		
PRAI DE 2002-10251524	A	20021104	<--	
WO 2003-EP50773	W	20031031	<--	
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
AB	The title polymers, especially hydrophilic polyquaternary polysiloxane copolymer, having ether groups in the chain backbones and salt groups in the side chains or on the chain backbones are useful as washing- resistant laundry fabric softeners, and in detergents, drying composition for surface treatment and cosmetics. A quaternary ammonium siloxane was prepared by heating N,N,N',N'-tetramethylhexanediamine 19.38, acetic acid 12.14, a solution of ethylene glycol diglycidyl ether in ethylene glycol di-Me ether 35.26, di-Me polysiloxane diol diglycidyl ether 150, dodecanic acid 2.5, and trimethylamine 0.33 g in aqueous iso-PrOH at 90° for 16 h.			
IC	ICM D06M0015-643 ICS C08G0077-388; C08G0077-452			
CC	46-5 (Surface Active Agents and Detergents)			
Section cross-reference(s):	62			
IT	689295-66-7P 689295-68-9P 689295-70-3P			
RL:	COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)			
	(linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)			
IT	689295-66-7P 689295-70-3P			
RL:	COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)			
	(linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)			
RN	689295-66-7 HCPLUS			

CN 1,6-Hexanediamine, N,N,N',N'-tetramethyl-, polymer with α -(dimethyl[3-(oxiranylmethoxy)propyl]silyl)- ω -[(dimethyl[3-(oxiranylmethoxy)propyl]silyl)oxy]poly[oxy(dimethylsilylene)] and 2,2'-[1,2-ethanediylbis(oxyethylene)]bis[oxirane], acetate (salt) dodecanoate (salt), compd. with N,N-dimethylmethanamine (9CI) (CA INDEX NAME)

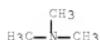
CM 1

CRN 143-07-7
CMF C12 H24 O2



CM 2

CRN 75-50-3
CMF C3 H9 N



CM 3

CRN 64-19-7
CMF C2 H4 O2

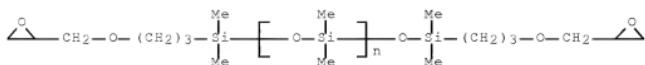


CM 4

CRN 689295-65-6
CMF (C10 H24 N2 . C8 H14 O4 . (C2 H6 O Si)n C16 H34 O5 Si2)x
CCI PMS

CM 5

CRN 130167-23-6
CMF (C2 H6 O Si)n C16 H34 O5 Si2
CCI PMS



CM 6

CRN 2224-15-9
CMF C8 H14 O4

CM 7

CRN 111-18-2
CMF C10 H24 N2

RN 689295-70-3 HCPLUS

CN 1,6-Hexanediamine, N,N,N',N'-tetramethyl-, polymer with
 α -(dimethyl[3-(oxiranylmethoxy)propyl]silyl)- ω -[(dimethyl[3-(oxiranylmethoxy)propyl]silyl)oxy]poly[oxy(dimethylsilylene)] and
 1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl]disiloxane, acetate
 (salt) dodecanoate (salt), compd. with N,N-dimethylmethanamine (9CI) (CA
 INDEX NAME)

CM 1

CRN 143-07-7
CMF C12 H24 O2

CM 2

CRN 75-50-3
CMF C3 H9 N

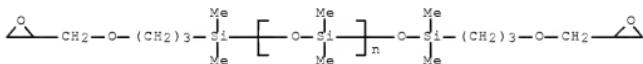
CM 3

CRN 64-19-7
CMF C2 H4 O2

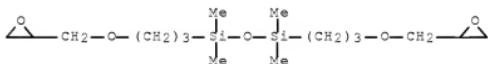
CM 4

CRN 689295-69-0
CMF (C16 H34 O5 Si2 . C10 H24 N2 . (C2 H6 O Si)n C16 H34 O5 Si2)x
CCI PMS

CM 5

CRN 130167-23-6
CMF (C2 H6 O Si)n C16 H34 O5 Si2
CCI PMS

CM 6

CRN 126-80-7
CMF C16 H34 O5 Si2

CM 7

CRN 111-18-2
CMF C10 H24 N2

Me2N—(CH2)6—NMe2

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
 RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 5 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 2004:413005 HCAPLUS Full-text
 DN 140:408672
 TI Linear polyamino and/or polyammonium polysiloxane copolymers
 IN Lange, Horst; Witossek, Anita; Wagner, Poland; Stachulla, Karl-Heinz; Graydon, Andrew Russell; Hartshorn, Richard Timothy; Boutique, Jean-Pol; Delplanque, Patrick Firmin August; Johnston, James Pyott; Sockel, Karl-Heinz
 PA GE Bayer Silicones GmbH & Co. KG, Germany
 SO PCT Int. Appl., 73 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004041912	A1	20040521	WO 2003-EP50775	20031031 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA	2504910	A1	20040521	CA 2003-2504910	20031031 <--
AU	2003301852	A1	20040607	AU 2003-301852	20031031 <--
EP	1565512	A1	20050824	EP 2003-810455	20031031 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR	2003016000	A	20050913	BR 2003-16000	20031031 <--
CN	1735648	A	20060215	CN 2003-80108252	20031031 <--
CN	100457804	C	20090204		
JP	2006505644	T	20060216	JP 2004-549175	20031031 <--
US	20060233939	A1	20061005	US 2003-533769	20031031 <--
MX	2005004762	A	20050803	MX 2005-4762	20050503 <--
OS	7563857	B2	20090721	US 2006-533769	20060320 <--
PRAI	DE 2002-10251526	A	20021104		<--
	WO 2003-EP50775	W	20031031		<--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The title polymers, especially hydrophilic polyquaternary polysiloxane copolymer, having ether groups in the chain backbones and salt groups in the side chains or on the chain backbones are useful as a washing-resistant laundry fabric softeners and in detergents, drying compns. for surface treatment and cosmetics. An ionene-siloxane manufactured by heating imidazole-terminated di-Me siloxane 50, imidazole 2.38, epichlorohydrin 3.24, and diethylen glycol bis(chloracetate) 0.91 g in iso-PrOH at 80° for 14.5 h exhibits, as a fabric softener (e.g., for cotton), an excellent resistance to common detergent laundering.

IC ICM C99G077-54

ICS D06M0015-643

CC 46-5 (Surface Active Agents and Detergents)
 Section cross-reference(s): 62

ST polysiloxane salt amino modified laundry fabric softener; ionene polysiloxane polyquaternary amino group contg manuf; textile finishing agent amino modified polysiloxane salt; fabric softener cotton resistance detergent laundering; siloxane imidazole epichlorohydrin diethylene glycol chloroacetate manuf

IT Polysiloxanes, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (ionene-polyether-; linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT Polyethers, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (ionene-polysiloxane-; linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT Cosmetics
 Detergents
 Fabric softeners
 Laundering
 Surface treatment
 (linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT Ionene polymers
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (polyether-polysiloxane-; linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT 689235-66-7P 689295-67-8P 689295-70-3P
 690233-16-0P
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT 79-04-9, Chloroacetyl chloride 111-46-6, Diethylene glycol, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT 109-01-3, N-Methylpiperazine 288-32-4, Imidazole, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (monomer precursor; linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT 154394-31-7P, Diethylene glycol bis(dichloroacetate)
 402922-95-4P 690233-14-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; linear polyamino and/or polyammonium

polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT 699233-18-2P
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

IT 689295-66-7P 689295-67-8P 689295-70-3P
 699233-16-0P
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

RN 689295-66-7 HCPLUS

CN 1,6-Hexanediamine, N,N,N',N'-tetramethyl-, polymer with α -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- ω -[(dimethyl[3-(oxiranylmethoxy)propyl]silyl)oxy]poly[oxy(dimethylsilylene)] and 2,2'-[1,2-ethanediylbis(oxymethylene)]bis[oxirane], acetate (salt) dodecanoate (salt), compd. with N,N-dimethylmethanamine (9CI) (CA INDEX NAME)

CM 1

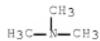
CRN 143-07-7

CMF C12 H24 O2



CM 2

CRN 75-50-3
 CMF C3 H9 N



CM 3

CRN 64-19-7
 CMF C2 H4 O2



CM 4

CRN 689295-65-6

CMF (C10 H24 N2 . C8 H14 O4 . (C2 H6 O Si)n C16 H34 O5 Si2)x

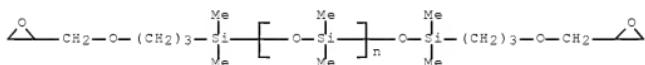
CCI PMS

CM 5

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

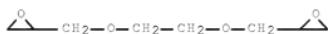
CCI PMS



CM 6

CRN 2224-15-9

CMF C8 H14 O4



CM 7

CRN 111-18-2

CMF C10 H24 N2



RN 689295-67-8 HCPLUS

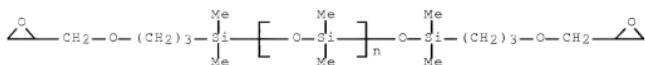
CN 1H-Imidazole-1-propanamine, polymer with
 α -(dimethyl[3-(oxiranylmethoxy)propyl]silyl)- ω -[(dimethyl[3-(oxiranylmethoxy)propyl]silyl)oxy]poly[oxy(dimethylsilylene)] and
 $2,2'$ -[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis(oxirane) (9CI)
 (CA INDEX NAME)

CM 1

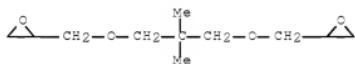
CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

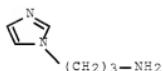
CCI PMS



CM 2

CRN 17557-23-2
CMF C11 H20 O4

CM 3

CRN 5036-48-6
CMF C6 H11 N3

RN 689295-70-3 HCPLUS
 CN 1,6-Hexanediamine, N,N,N',N'-tetramethyl-, polymer with
 α-(dimethyl[3-(oxiranylmethoxy)propyl]silyl)-ω-[dimethyl[3-(
 oxiranylmethoxy)propyl]silyl]oxylpoly[oxy(dimethylsilylene)] and
 1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl]disiloxane, acetate
 (salt) dodecanoate (salt), compd. with N,N-dimethylmethanamine (9CI) (CA
 INDEX NAME)

CM 1

CRN 143-07-7
CMF C12 H24 O2

CM 2

CRN 75-50-3
CMF C3 H9 N



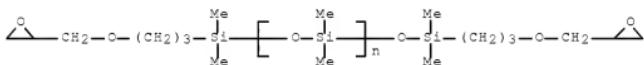
CM 3

CRN 64-19-7
CMF C2 H4 O2

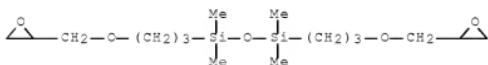
CM 4

CRN 689295-69-0
CMF (C16 H34 O5 Si2 . C10 H24 N2 . (C2 H6 O Si)n C16 H34 O5 Si2)x
CCI PMS

CM 5

CRN 130167-23-6
CMF (C2 H6 O Si)n C16 H34 O5 Si2
CCI PMS

CM 6

CRN 126-80-7
CMF C16 H34 O5 Si2

CM 7

CRN 111-18-2
CMF C10 H24 N2



RN 690233-16-0 HCPLUS
 CN Acetic acid, dichloro-, oxydi-2,1-ethanediyl ester, polymer with
 (chloromethyl)oxirane, α -[(3-[2-hydroxy-3-(1H-imidazol-1-
 yl)propoxy]propyl)dimethylsilyl]- ω -[(3-[2-hydroxy-3-(1H-imidazol-1-
 yl)propoxy]propyl)dimethylsilyl]oxy]poly[(dimethylsilylene)] and
 1H-imidazole, chloride (9CI) (CA INDEX NAME)

CM 1

CRN 690233-15-9

CMF (C₈ H₁₀ Cl₄ O₅ . C₃ H₅ Cl O . C₃ H₄ N₂ . (C₂ H₆ O Si)_n C₂₂ H₄₂ N₄ O₅ Si₂)_x

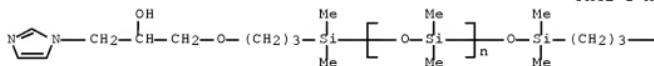
CCI PMS

CM 2

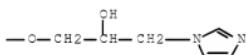
CRN 690233-14-8

CMF (C₂ H₆ O Si)_n C₂₂ H₄₂ N₄ O₅ Si₂
 CCI PMS

PAGE 1-A



PAGE 1-B



CM 3

CRN 154394-31-7

CMF C₈ H₁₀ Cl₄ O₅

CM 4

CRN 288-32-4

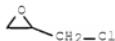
CMF C₃ H₄ N₂



CM 5

CRN 106-89-8

CMF C3 H5 Cl O



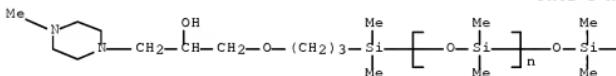
IT 402922-85-1P 690233-14-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; linear polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

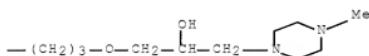
RN 402922-85-4 HCPLUS

CN Poly[oxy(dimethylsilylene)], α -[(3-[2-hydroxy-3-(4-methyl-1-piperazinyl)propoxy]propyl]dimethylsilyl]- ω -[(3-[2-hydroxy-3-(4-methyl-1-piperazinyl)propoxy]propyl]dimethylsilyloxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



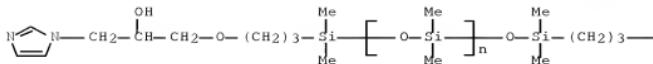
PAGE 1-B



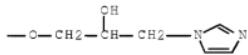
RN 690233-14-8 HCPLUS

CN Poly[oxy(dimethylsilylene)], α -[(3-[2-hydroxy-3-(1H-imidazol-1-yl)propoxy]propyl]dimethylsilyl]- ω -[(3-[2-hydroxy-3-(1H-imidazol-1-yl)propoxy]propyl]dimethylsilyloxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 690233-18-2P

RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(polyamino and/or polyammonium polysiloxane copolymers useful as fabric softeners and in detergents, drying compns. for surface treatment and cosmetics.)

RN 690233-18-2 HCAPLUS

CN Acetic acid, dichloro-, oxydi-2,1-ethanediyl ester, polymer with α -[(3-[2-hydroxy-3-(4-methyl-1-piperazinyl)propoxy]propyl]dimethylsilyl]- ω -{[(3-[2-hydroxy-3-(4-methyl-1-piperazinyl)propoxy]propyl]dimethylsilyl]oxy}poly[oxy(dimethylsilylene)] and piperazine, chloride (9CI) (CA INDEX NAME)

CM 1

CRN 690233-17-1

CMF (C8 H10 Cl4 O5 . C4 H10 N2 . (C2 H6 O Si)n C26 H58 N4 O5 Si2)x

CCI PMS

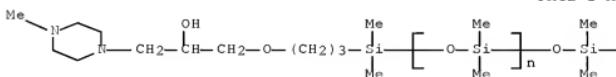
CM 2

CRN 402922-85-4

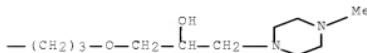
CMF (C2 H6 O Si)n C26 H58 N4 O5 Si2

CCI PMS

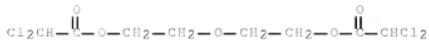
PAGE 1-A



PAGE 1-B



CM 3

CRN 154394-31-7
CMF C8 H10 Cl4 O5

CM 4

CRN 110-85-0
CMF C4 H10 N2

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 6 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 2004:392558 HCAPLUS Full-text

DN 140:408668

TI Anti-soiling detergent composition

IN Yaghi, Mari; Sado, Mitsuo; Abe, Yuki

PA Johnsondiversey, Inc., USA

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004039931	A1	20040513	WO 2003-US33396	20031021 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP	2004162041	A	20040610	JP 2003-356224	20031016 <--
CA	2502606	A1	20040513	CA 2003-2502606	20031021 <--
CA	2502606	C	20090106		
AU	2003280001	A1	20040525	AU 2003-280001	20031021 <--
AU	2003280001	B2	20090716		

EP 1554368	A1	20050720	EP 2003-773307	20031021 <--
EP 1554368	B1	20070307		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003015635	A	20050823	BR 2003-15635	20031021 <--
CN 1717472	A	20060104	CN 2003-80104104	20031021 <--
AT 356188	T	20070315	AT 2003-773307	20031021 <--
NZ 539507	A	20070629	NZ 2003-539507	20031021 <--
ES 2279184	T3	20070816	ES 2003-773307	20031021 <--
US 20060154840	A1	20060713	US 2005-532321	20050422 <--
MX 2005004414	A	20050726	MX 2005-4414	20050425 <--
US 20060041418	A1	20080221	US 2007-877288	20071023 <--
US 7375068	B2	20080520		
PRAI JP 2002-310790	A	20021025	<--	
JP 2003-356224	A	20031016	<--	
WO 2003-US33396	W	20031021	<--	
US 2005-532321	A1	20050422		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB	An anti-soiling detergent composition has excellent detergency, endows cleaned surfaces with a pronounced anti-soiling effect, effectively sustains the anti-staining effect, possesses superb storage stability, and can be used on restrooms, sinks, baths, and other damp, hard surfaces. The anti-soiling detergent composition contains (A) 0.05-10% polyetheramide-modified organopolysiloxane and/or amino-modified organopolysiloxane, (B) 0.1-30% specific surfactant, (C) 0.1-20% metal chelating agent, and (D) H2O.
IC	ICM C11D0003-37
CC	46-5 (Surface Active Agents and Detergents)
ST	polyetheramide polysiloxane antisoiling detergent bathroom surface; amino polysiloxane antisoiling detergent bathroom surface
IT	Polysiloxanes RL: TEM (Technical or engineered material use); USES (Uses) (3-[(2-aminoethyl)amino]propyl Me, di-Me, SF 8417; in antisoiling detergent composition for damp hard surfaces)
IT	Polysiloxanes RL: TEM (Technical or engineered material use); USES (Uses) (amine; in antisoiling detergent composition for damp hard surfaces)
IT	Quaternary ammonium compounds RL: TEM (Technical or engineered material use); USES (Uses) (benzyl-C12-14-alkyldimethyl, chlorides, Cation G 50, surfactant; in antisoiling detergent composition for damp hard surfaces)
IT	Poly siloxanes RL: TEM (Technical or engineered material use); USES (Uses) (polyamide-polyether-; in antisoiling detergent composition for damp hard surfaces)
IT	Polyethers RL: TEM (Technical or engineered material use); USES (Uses) (polyamide-siloxane-; in antisoiling detergent composition for damp hard surfaces)
IT	Polyamides RL: TEM (Technical or engineered material use); USES (Uses) (polyether-siloxane-; in antisoiling detergent composition for damp hard surfaces)
IT	60-00-4, EDTA, uses 77-92-9, Citric acid, uses 994-36-5, Sodium citrate 5064-31-3 271260-32-3D, Dimethylsilanediol-methylsilanediol-oxirane graft copolymer dodecyl ether, trimethylsilyl-terminated 688349-31-7D, trimethylsilyl-terminated 688349-33-9D, trimethylsilyl-terminated RL: TEM (Technical or engineered material use); USES (Uses) (in antisoiling detergent composition for damp hard surfaces)

IT 7173-51-5, Bardac 2280 9043-30-5, Lutensol TO 8 688789-86-8,
 Naroakty ID 70 688789-88-0, Tego Betain L 105
 RL: TEM (Technical or engineered material use); USES (Uses)
 (surfactant; in antisoiling detergent composition for damp hard surfaces)
 IT 271260-32-3D, Dimethylsilanediol-methylsilanol-oxirane graft
 copolymer dodecyl ether, trimethylsilyl-terminated
 RL: TEM (Technical or engineered material use); USES (Uses)
 (in antisoiling detergent composition for damp hard surfaces)
 RN 271260-32-3 HCAPLUS
 CN Silanediol, 1,1-dimethyl-, polymer with 1-methylsilanediol and oxirane,
 dodecyl ether, graft (CA INDEX NAME)

CM 1

CRN 112-53-8

CMF C12 H26 O

HO—(CH₂)₁₁—Me

CM 2

CRN 156310-28-0

CMF (C₂ H₈ O₂ Si . C₂ H₄ O . C H₆ O₂ Si)x
 CCI PMS

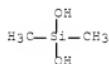
CM 3

CRN 43641-90-3

CMF C H₆ O₂ Si

CM 4

CRN 1066-42-8

CMF C₂ H₈ O₂ Si

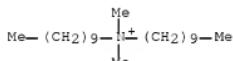
CM 5

CRN 75-21-8

CMF C₂ H₄ O



IT 7173-51-5, Bardac 2280
 RL: TEM (Technical or engineered material use); USES (Uses)
 (surfactant; in antisoiling detergent composition for damp hard surfaces)
 RN 7173-51-5 HCPLUS
 CN 1-Decanaminium, N-decyl-N,N-dimethyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 7 OF 23 HCPLUS COPYRIGHT 2009 ACS on STN
 AN 2004:392296 HCPLUS Full-text
 DN 140:408666
 TI Fabric treatment compositions comprising different silicones, a process
 for preparing them and a method for using them
 IN Boutique, Jean-pol; Delplancke, Patrick Firmin August; Wagner,
 Roland; Butts, Matthew David; Genovese, Sarah Elizabeth
 PA The Procter & Gamble Company, USA
 SO U.S. Pat. Appl. Publ., 18 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20040092424	A1	20040513	US 2003-700809	20031104 <--
	US 6833344	B2	20041221		
	CA 2502310	A1	20040521	CA 2003-2502310	20031029 <--
	WO 2004041987	A1	20040521	WO 2003-US34492	20031029 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU	2003284376	A1	20040607	AU 2003-284376	20031029 <--
EP	1558719	A1	20050803	EP 2003-776613	20031029 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003015981 A 20050920 BR 2003-15981 20031029 <--

CN 1705736 A 20051207 CN 2003-80101910 20031029 <--

JP 2006504002 T 20060202 JP 2004-550256 20031029 <--

MX 2005004807 A 20050722 MX 2005-4807 20050504 <--

PRAI US 2002-423485P P 20021104 <--

WO 2003-US34492 W 20031029 <--

AB The fabric treatment compns. for providing improved fabric care comprise (a) ≥ 1 cationic silicone polymers containing ≥ 1 polysiloxane units and ≥ 1 quaternary N moieties, and (b) ≥ 1 N-free silicone polymers, wherein the a/b weight ratio is (0.01-10):1, preferably (0.05-5):1, and more preferably (0.1-1):1. The fabric treatment compns. can be used as rinse-added fabric softening compns., fabric finishing compns., laundry detergent compns., and combinations thereof.

IC ICM C11D0001-00

INCL 510466000; 510475000

CC 46-5 (Surface Active Agents and Detergents)

ST cationic silicone fabric care treatment; polysiloxane fabric treatment laundry

IT Polysiloxanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(fabric treatment compns. containing different silicones for providing improved fabric care)

IT Polysiloxanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(polyoxyalkylene-, block, terminal quaternary ammonium group-containing, cationic; fabric treatment compns. containing different silicones for providing improved fabric care)

IT Polyoxyalkylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-, block, terminal quaternary ammonium group-containing, cationic; fabric treatment compns. containing different silicones for providing improved fabric care)

IT Quaternary ammonium compounds, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-, fabric treatment compns. containing different silicones for providing improved fabric care)

IT Polysiloxanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(terminal quaternary ammonium group-containing, cationic; fabric treatment compns. containing different silicones for providing improved fabric care)

IT 31900-57-9, Polydimethylsiloxane

RL: TEM (Technical or engineered material use); USES (Uses)
(assumed monomers; fabric treatment compns. containing different silicones for providing improved fabric care)

IT 9016-00-6, Polydimethylsiloxane

RL: TEM (Technical or engineered material use); USES (Uses)
(fabric treatment compns. containing different silicones for providing improved fabric care)

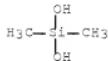
IT 31900-57-9, Polydimethylsiloxane

RL: TEM (Technical or engineered material use); USES (Uses)
(assumed monomers; fabric treatment compns. containing different silicones for providing improved fabric care)

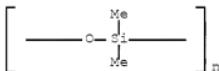
RN 31900-57-9 HCAPLUS

CN Silanediol, 1,1-dimethyl-, homopolymer (CA INDEX NAME)

CRN 1066-42-8
 CMF C2 H8 O2 Si



IT 9016-00-6, Polydimethylsiloxane
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fabric treatment compns. containing different silicones for providing
 improved fabric care)
 RN 9016-00-6 HCPLUS
 CN Poly[oxy(dimethylsilylene)] (CA INDEX NAME)



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
 RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

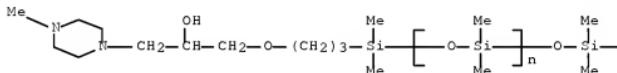
L80 ANSWER 8 OF 23 HCPLUS COPYRIGHT 2009 ACS on STN
 AN 2003:117943 HCPLUS Full-text
 DN 138:155398
 TI Fabric care systems providing anti-wrinkle benefits to fabric containing
 quaternary ammonium silicone compound
 IN Zhang, Shulin Larry; Littig, Janet Sue; Casado-Dominiguez, Arturo Luis
 PA The Procter & Gamble Company, USA
 SO PCT Int. Appl., 40 pp.
 CODEN: PIXXD2

DT Patent
 LA English
 FAN.CNT 1

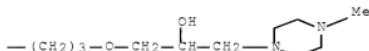
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003012020	A2	20030213	WO 2002-US23451	20020723 <--
	WO 2003012020	A3	20031030		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KE, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US	20030096728	A1	20030522	US 2002-196398	20020716 <--
US	6818610	B2	20041116		
CA	2451920	A1	20030213	CA 2002-2451920	20020723 <--

AU 2002355829 A1 20030217 AU 2002-355829 20020723 <--
 EP 1412465 A2 20040428 EP 2002-752548 20020723 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
 JP 2005520058 T 20050707 JP 2003-517198 20020723 <--
 JP 4101751 B2 20080618
 MX 2004000791 A 20040521 MX 2004-791 20040126 <--
 US 20040259762 A1 20041223 US 2004-896109 20040721 <--
 US 7196048 B2 20070327
 PRAI US 2001-308204P P 20010727 <--
 US 2002-352940P P 20020130 <--
 US 2002-196398 A3 20020716 <--
 WO 2002-US23451 W 20020723 <--
 AB An anti-wrinkle fabric treatment composition used as a fabric rinse additive composition, comprises: (a) about 0.01-20 wt% of a cationic silicone polymer or copolymer having the formula of [CAP]-Zm-[CAP] wherein each Z unit comprises at least one secondary, tertiary, or quaternary amino moiety, or mixts. thereof; [CAP] is a backbone termination or truncation unit; m = 1-50. (b) about 1-30 wt% of a scavenger effective in scavenging compds. comprising an anionic unit; and (c) the balance a carrier system.
 IC ICM C11D0003-37
 ICS C11D0003-00; C11D0001-62
 CC 46-5 (Surface Active Agents and Detergents)
 IT 394220-52-1P 402922-85-4P 402922-88-7P 496878-30-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (fabric care system providing anti-wrinkle benefits to fabric)
 IT 402922-95-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (fabric care system providing anti-wrinkle benefits to fabric)
 RN 402922-85-4 HCPLUS
 CN Poly[oxy(dimethylsilylene)], ω -[[3-[2-hydroxy-3-(4-methyl-1-piperazinyl)propoxy]propyl]dimethylsilyl]- ω -[[[3-[2-hydroxy-3-(4-methyl-1-piperazinyl)propoxy]propyl]dimethylsilyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 9 OF 23 HCPLUS COPYRIGHT 2009 ACS on STN
 AN 2002:172034 HCPLUS Full-text
 DN 136:233928

TI Fabric care compositions comprising cationic silicones and treatment of fabrics
 IN Masschelein, Axel; Delplancke, Patrick Firmin August; Salden, Ivo;
 Boutique, Jean-pol; Johnston, James Pyott; Smerznak, Mark Allen; Broeckx,
 Walter August Maria; Merere, Ingrid; Trujillo, Rosaldo Rafael
 PA The Procter & Gamble Company, USA
 SO PCT Int. Appl., 50 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018528	A1	20020307	WO 2001-US26444	20010824 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
OS 20020103094		A1	20020801	US 2001-935927	20010823 <--
OS 6903051		B2	20050607		
CA 2417654		A1	20020307	CA 2001-2417654	20010824 <--
AU 2001086709		A	20020313	AU 2001-86709	20010824 <--
EP 1313828		A1	20030528	EP 2001-966172	20010824 <--
EP 1313828		B1	20061011		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001013586		A	20030722	BR 2001-13586	20010824 <--
JP 2005513278		T	20050512	JP 2002-524031	20010824 <--
AU 2001286709		B2	20051006	AU 2001-286709	20010824 <--
AT 342331		T	20061115	AT 2001-966172	20010824 <--
ES 2273881		T3	20070516	ES 2001-966172	20010824 <--
CN 100422300		C	20081001	CN 2001-817811	20010824 <--
MX 2003001789		A	20030604	MX 2003-1789	20030227 <--
US 20050164900		A1	20050728	US 2005-40038	20050121 <--
US 7384903		B2	20080610		
PRAI US 2006-238170P		P	20000828	<--	
US 2006-243825P		P	20001027	<--	
US 2006-249059P		P	20001115	<--	
OS 2001-268174P		P	20010212	<--	
OS 2001-935927		A1	20010823	<--	
WO 2001-US26444		W	20010824	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Domestic laundering of fabrics incorporate treatment agents comprising selected cationic silicones. A fabric care composition also contains ≥ 1 laundry adjunct agents selected from stabilizers, e.g. trihydroxystearin, nonionic surfactant, cationic surfactant, coupling agent, builders, perfume, dye or surfactant scavenger, fabric softener, enzyme, chelant, solvent, effervescent, encapsulant, or mixts. of these.

IC C11D003-37
 ICS D06M0015-643

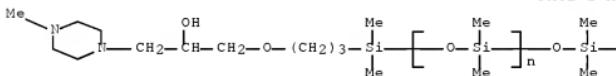
CC 46-5 (Surface Active Agents and Detergents)

IT 26755-51-1P, Propargyl α -chloroacetate 394220-51-0P 395660-27-2P
 462922-85-4P

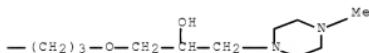
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(fabric care compns. comprising cationic silicones for softness and wrinkle recovery in home laundering of fabrics)
 IT 402922-85-4P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (fabric care compns. comprising cationic silicones for softness and wrinkle recovery in home laundering of fabrics)
 RN 402922-85-4 HCAPLUS
 CN Poly[oxy(dimethylsilylene)], α -[[3-[2-hydroxy-3-(4-methyl-1-piperazinyl)propoxy]propyl]dimethylsilyl]- ω -[[[3-[2-hydroxy-3-(4-methyl-1-piperazinyl)propoxy]propyl]dimethylsilyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



O.S.C.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 10 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:138788 HCAPLUS Full-text

DN 136:185798

TI Linear amino acid-modified polysiloxane salts and their manufacture and use

IN Lange, Horst; Wagner, Roland; Witossek, Anita; Stachulla, Karl-Heinz; Teuber, Siegfried

PA GE Bayer Silicones GmbH & Co. KG, Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 10036522	A1	20020221	DE 2000-10036522	20000727 <--
PRAI DE 2000-10036522		20000727		

AB Tertiary amino acid-functionalized polysiloxanes having ether groups in the chain backbones and salt groups in the side chains or on the chain backbones are useful for cosmetics, polishes, drying compns. for hard surfaces, textile finishing agents, and laundry fabric softeners. A typical salt was manufactured by heating 1.78 g β -alanine and 1.12 g KOH in 200 mL iso-PrOH 15 min at reflux and adding 57.2 g α,ω -bis(3-glycidyloxypropyl)dimethylsilyl polydimethylsiloxane in 12 h at reflux temperature

ICM C08G0077-46

ICS C08L0083-12; C09D0183-12; C11D0001-83; A61K0007-06
 CC 46-4 (Surface Active Agents and Detergents)
 Section cross-reference(s): 40, 42, 62

ST polysiloxane salt amino acid modified laundry fabric softener; ionene polysiloxane tertiary amino acid contg manuf; textile finishing agent amino acid modified polysiloxane salt; drying compn amino acid modified polysiloxane salt; polish amino acid modified polysiloxane salt; cosmetic amino acid modified polysiloxane salt

IT Polysiloxanes, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (ionene-polyether-; linear tertiary amino acid-modified polysiloxane salts)

IT Polyethers, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (ionene-polysiloxane-; linear tertiary amino acid-modified polysiloxane salts)

IT Cosmetics
 Drying agents
 Fabric finishing agents
 Fabric softeners
 (linear tertiary amino acid-modified polysiloxane salts)

IT Polysiloxanes, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (polyamine-polyether-; linear tertiary amino acid-modified polysiloxane salts)

IT Polyethers, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (polyamine-polysiloxane-; linear tertiary amino acid-modified polysiloxane salts)

IT Ionene polymers
 Polyamines
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (polyether-polysiloxane-; linear tertiary amino acid-modified polysiloxane salts)

IT 106-78-5DP, Diethylene glycol bis(chloroacetate), ionenes with potassium sarcosinate and bis(glycidyloxypropyl) polydimethylsiloxane 130167-23-6DP, ionenes with potassium sarcosinate and diethylene glycol bis(chloroacetate) 400629-09-6P
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (linear tertiary amino acid-modified polysiloxane salts)

IT 31900-57-9DP, Dimethylsilanated homopolymer, glycidyloxypropylidemethylsilyl-terminated, ionenes with potassium sarcosinate and diethylene glycol bis(chloroacetate) 56935-86-5DP, Potassium sarcosinate, reaction products with bis(glycidyloxypropyl) polydimethylsiloxane, ionenes with diethylene glycol bis(chloroacetate)
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or

engineered material use); BIOL (Biological study); PREP (Preparation);
 USES (Uses)
 (precursor; linear tertiary amino acid-modified polysiloxane
 salts)

IT 106-78-5P, Diethylene glycol bis(chloroacetate)
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (precursor; linear tertiary amino acid-modified polysiloxane
 salts)

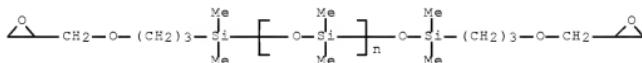
IT 111-46-6, Diethylene glycol, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (precursor; linear tertiary amino acid-modified polysiloxane
 salts)

IT 130167-23-6P, ionenes with potassium sarcosinate and diethylene
 glycol bis(chloroacetate) 400629-09-6P
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
 engineered material use); BIOL (Biological study); PREP (Preparation);
 USES (Uses)

(linear tertiary amino acid-modified polysiloxane salts)

RN 130167-23-6 HCPLUS

CN Poly[oxy(dimethylsilylene)], α -[dimethyl[3-(2-
 oxiranylmethoxy)propyl]silyl]- ω -[dimethyl[3-(2-
 oxiranylmethoxy)propyl]silyl]oxy] (CA INDEX NAME)



RN 400629-09-6 HCPLUS

CN β -Alanine, polymer with α -[dimethyl[3-
 (oxiranylmethoxy)propyl]silyl]- ω -[dimethyl[3-
 (oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsilylene)], potassium
 salt (9CI) (CA INDEX NAME)

CM 1

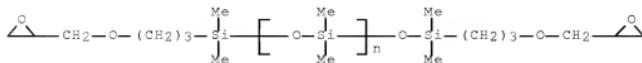
CRN 400629-08-5

CMF (C₃ H₇ N O₂ . (C₂ H₆ O Si)_n C₁₆ H₃₄ O₅ Si₂)_x
 CCI PMS

CM 2

CRN 130167-23-6

CMF (C₂ H₆ O Si)_n C₁₆ H₃₄ O₅ Si₂
 CCI PMS



CM 3

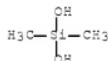
CRN 107-95-9
CMF C3 H7 N O2

H2N—CH2—CH2—CO2H

IT 31900-57-9DP, Dimethylsilanediol homopolymer,
glycidyloxypropylidemethylsilyl-terminated, ionenes with potassium
sarcosinate and diethylene glycol bis(chloroacetate)
RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
engineered material use); BIOL (Biological study); PREP (Preparation);
USES (Uses)
(precursor; linear tertiary amino acid-modified polysiloxane
salts)

RN 31900-57-9 HCAPLUS
CN Silanediol, 1,1-dimethyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 1066-42-8
CMF C2 H8 O2 Si

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:122503 HCAPLUS Full-text
DN 136:168927

TI Production of polyquaternary ammonium
polysiloxanes and their use as washfast hydrophilic softeners for
textiles

IN Lange, Horst; Wagner, Roland; Witossek, Anita; Stachulla,
Karl-Heinz; Teuber, Siegfried; Schnerring, Albert; Moeller,
Annette

PA GE Bayer Silicones GmbH & Co. KG, Germany
SO Ger. Offen., 10 pp.

CODEN: GWXXBX

DT Patent
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10036533	A1	20020214	DE 2000-10036533	20000727 <--
	DE 10036533	B4	20050203		
	DE 10066215	B4	20070322	DE 2000-10066215	20000727 <--
PRAI	DE 2000-10036533	A3	20000727	<--	

AB Ionene-polysiloxanes having cyclic and(or) linear structures, useful as washfast softening agents for finishing textiles and as softening agents used with detergents, are manufactured by hydrosilylation of $H(SiMe_2O)nSiH_2$ with epoxides having terminal olefin groups at 50-150° in the presence of a catalyst and reaction of the product with a mixture of a tertiary amine and a ditertiary amine in the presence of a HA acid at 40-120° and epoxide group-tertiary amine group-HA acid mol ratio 1:1:1.

IC ICM C08G0677-46
ICS C08G0677-54; C08L0083-12; C08L0083-14; C09D0183-12;
C09D0183-14; C11D0003-30; A61K0007-06

CC 40-9 (Textiles and Fibers)
Section cross-reference(s): 46

ST ionene polysiloxane fabric softener; polysiloxane
unsatd epoxide adduct tertiary amine reaction

IT Polysiloxanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ionene-; production of polyquaternary ammonium polysiloxanes and their use as washfast hydrophilic softeners for textiles)

IT Ionene polymers
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polysiloxane-; production of polyquaternary ammonium polysiloxanes and their use as washfast hydrophilic softeners for textiles)

IT Fabric finishing agents
Fabric softeners
(production of polyquaternary ammonium polysiloxanes and their use as washfast hydrophilic softeners for textiles)

IT Amines, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(tertiary, reaction products, ionene-type, with epoxide-terminated polydimethylsiloxane and ditertiary amines; production of polyquaternary ammonium polysiloxanes and their use as washfast hydrophilic softeners for textiles)

IT 75-50-3DP, Trimethylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and tetramethylhexanediamine, salts with dodecanoic acid 112-18-5DP , ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 112-69-6DP, Dimethylhexadecylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 112-75-4DP, Dimethyltetradecylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 124-28-7DP, Dimethyloctadecylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 598-56-1DP, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 926-63-6DP, Dimethylpropylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 927-62-8DP, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 1120-24-7DP , Dimethyldecylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 4325-04-0DP , ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 7378-99-6DP , Dimethyloctylamine, ionene reaction products with epoxide-terminated

polydimethylsiloxane and ditertiary amines

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of polyquaternary ammonium polysiloxanes and their use as washfast hydrophilic softeners for textiles)

IT 75-50-3DP, Trimethylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and tetramethylhexanediamine, salts with dodecanoic acid 112-18-5DP , ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 112-69-6DP, Dimethylhexadecylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 112-75-4DP, Dimethyltetradecylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 124-28-7DP, Dimethyloctadecylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 598-56-1DP, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 926-63-6DP, Dimethylpropylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 927-62-8DP, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 1120-24-7DP , Dimethyldecylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 4385-04-0DP , ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines 7378-99-6DP , Dimethyloctylamine, ionene reaction products with epoxide-terminated polydimethylsiloxane and ditertiary amines RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of polyquaternary ammonium polysiloxanes and their use as washfast hydrophilic softeners for textiles)

RN 75-50-3 HCAPLUS

CN Methanamine, N,N-dimethyl- (CA INDEX NAME)



RN 112-18-5 HCAPLUS

CN 1-Dodecanamine, N,N-dimethyl- (CA INDEX NAME)



RN 112-69-6 HCAPLUS

CN 1-Hexadecanamine, N,N-dimethyl- (CA INDEX NAME)



RN 112-75-4 HCAPLUS
 CN 1-Tetradecanamine, N,N-dimethyl- (CA INDEX NAME)



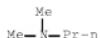
RN 124-28-7 HCAPLUS
 CN 1-Octadecanamine, N,N-dimethyl- (CA INDEX NAME)



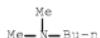
RN 598-56-1 HCAPLUS
 CN Ethanamine, N,N-dimethyl- (CA INDEX NAME)



RN 926-63-6 HCAPLUS
 CN 1-Propanamine, N,N-dimethyl- (CA INDEX NAME)



RN 927-62-8 HCAPLUS
 CN 1-Butanamine, N,N-dimethyl- (CA INDEX NAME)



RN 1120-24-7 HCAPLUS
 CN 1-Decanamine, N,N-dimethyl- (CA INDEX NAME)



RN 4385-04-0 HCAPLUS
 CN 1-Hexanamine, N,N-dimethyl- (CA INDEX NAME)



RN 7378-99-6 HCAPLUS
 CN 1-Octanamine, N,N-dimethyl- (CA INDEX NAME)

Me₂N—(CH₂)₇—Me

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 2062:107429 HCAPLUS Full-text

DN 136:153122

TI Polyammonium-polysiloxane compounds, methods for the production
 and use thereof

IN Lange, Horst; Wagner, Poland; Witossek, Anita; Stachulla,
 Karl-Heinz; Teuber, Siegfried; Kropfgans, Martin; Sockel,
 Karl-Heinz; Moeller, Annette

PA GE Bayer Silicones GmbH & Co. KG, Germany

SO PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002010257	A1	20020207	WO 2001-EP8699	20010727 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU	2001091687	A	20020213	AU 2001-91687	20010727 <--
CA	2423285	A1	20030324	CA 2001-2423285	20010727 <--
EP	1309649	A1	20030514	EP 2001-971792	20010727 <--
EP	1309649	B1	20040707		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP	2004050145	T	20040219	JP 2002-515984	20010727 <--
AT	270685	T	20040715	AT 2001-971792	20010727 <--
ES	2227271	T3	20050401	ES 2001-971792	20010727 <--
MX	2003000808	A	20030910	MX 2003-808	20030127 <--
IN	2003MN00116	A	20050204	IN 2003-MN116	20030127 <--
US	20040048996	A1	20040311	US 2003-333729	20030722 <--
US	7217777	B2	20070515		
PRAI	DE 2000-10036530	A	20000727	<--	
	DE 2000-10036541	A	20000727	<--	
	DE 2000-10036542	A	20000727	<--	
	DE 2000-10036543	A	20000727	<--	
	WO 2001-EP8699	W	20010727	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Polymers, useful for cosmetics, polishes, surface drying agent, and fabric
 finishing agents, and fabric softeners in laundering, contain (a) ≥1

polyoxyalkylene unit, (b) ≥ 1 di- or trivalent organic group having ≥ 1 ammonium substituent, (c) ≥ 1 polysiloxane unit terminated by di- or trivalent cyclic or branched C2-40 hydrocarbon optionally substituted by OH groups and bridged by amine, C:O, C:S, or ammonium groups, and (d) ≥ 1 (in)organic acid residue for neutralization of the ammonium group(s). A typical polymer was manufactured by reaction of polyethylene glycol monoallyl ether (d.p. 8) with ClCH₂COCl at 120°, reaction of the intermediate 8 h with dimethylallyl-terminated polydimethylsiloxane in the presence of hexachloroplatinic acid at 130°, and quaternization of the 2nd intermediate 6 h at 90° with N,N'-dimethylpiperazine.

ICM C08G0077-46
 ICS A61K0007-48; D06M0015-647; C08G0077-54
 CC 46-5 (Surface Active Agents and Detergents)
 Section cross-reference(s): 40, 42, 62
 ST polyammonium polysiloxane polyoxyalkylene cosmetic;
 textile finishing agent polyammonium polysiloxane
 polyoxyalkylene; fabric softener polyammonium polysiloxane
 polyoxyalkylene; drying agent surface polyammonium
 polysiloxane polyoxyalkylene; polish polyammonium
 polysiloxane polyoxyalkylene
 IT Polysiloxanes, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
 engineered material use); BIOL (Biological study); PREP (Preparation);
 USES (Uses)
 (ionene-polyoxyalkylene-, block; polyoxyalkylene
 polyammonium polysiloxane compds. for fabric softeners
 combined with detergents in laundering)
 IT Polyoxyalkylenes, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
 engineered material use); BIOL (Biological study); PREP (Preparation);
 USES (Uses)
 (ionene-polysiloxane-, block; polyoxyalkylene
 polyammonium polysiloxane compds. for fabric softeners
 combined with detergents in laundering)
 IT Quaternary ammonium compounds, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
 engineered material use); BIOL (Biological study); PREP (Preparation);
 USES (Uses)
 (polymers; polyoxyalkylene polyammonium polysiloxane
 compds. for fabric softeners combined with detergents in laundering)
 IT Cosmetics
 (polyoxyalkylene polyammonium polysiloxane compds.
 for cosmetics)
 IT Drying agents
 (polyoxyalkylene polyammonium polysiloxane compds.
 for drying agents)
 IT Fabric softeners
 Laundering
 (polyoxyalkylene polyammonium polysiloxane compds.
 for fabric softeners combined with detergents in laundering)
 IT Polishing materials
 (polyoxyalkylene polyammonium polysiloxane compds.
 for polishes)
 IT Fabric finishing agents
 (polyoxyalkylene polyammonium polysiloxane compds.
 for textile finishing agents)
 IT Polysiloxanes, uses
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
 engineered material use); BIOL (Biological study); PREP (Preparation);

USES (Uses)

(polyoxyalkylene-, block, quaternary ammonium derivs.; polyoxyalkylene polyammonium polysiloxane compds. for fabric softeners combined with detergents in laundering)

IT Ionene polymers

RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation);
USES (Uses)

(polyoxyalkylene-polysiloxane-, block; polyoxyalkylene polyammonium polysiloxane compds. for fabric softeners combined with detergents in laundering)

IT Polyoxyalkylenes, uses

RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation);
USES (Uses)

(polysiloxane-, block, quaternary ammonium derivs.; polyoxyalkylene polyammonium polysiloxane compds. for fabric softeners combined with detergents in laundering)

IT 106-58-1DP, N,N'-Dimethylpiperazine, ionene derivs. with adducts of polyethylene glycol monoallyl ether chloroacetate and dimethylsilyl-terminated polydimethylsiloxane

109-01-3DP, N-Methylpiperazine, reaction products with epoxy-terminated polydimethylsiloxane, salts with triethylene glycol monomethyl ether chloroacetate 110-85-0DP, Piperazine, reaction products with epoxy-terminated polydimethylsiloxane, salts with triethylene glycol monomethyl ether chloroacetate

31900-57-9DP, Dimethylsilanediol homopolymer, dimethylsilyl-terminated, reaction products with polyethylene glycol monoallyl ether chloroacetate, ionene derivs. 56867-89-1DP, ionene derivs. with adducts of methylpiperazine and epoxy-terminated

polydimethylsiloxane 90948-78-0DP, salts with adducts of methylpiperazine and epoxy-terminated polydimethylsiloxane

115254-29-0DP, Dimethylsilanediol homopolymer, sru

dimethylsilyl-terminated, reaction products with polyethylene glycol monoallyl ether chloroacetate, ionene derivs. 130167-23-6DP, reaction products with methylpiperazine, salts with triethylene glycol

monomethyl ether chloroacetate 395660-26-1DP, reaction products with dimethylsilyl-terminated polydimethylsiloxane, ionene derivs.

395660-27-2DP, ionene derivs. with adducts of polyethylene glycol monoallyl ether chloroacetate and dimethylsilyl-terminated polydimethylsiloxane

RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation);
USES (Uses)

(polyoxyalkylene polyammonium polysiloxane compds. for fabric softeners combined with detergents in laundering)

IT 126-80-7P

RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation);
USES (Uses)

(precursor; polyoxyalkylene polyammonium polysiloxane compds. for fabric softeners combined with detergents in laundering)

IT 109-01-3, N-Methylpiperazine 111-46-6, Diethylene glycol, reactions

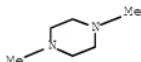
RL: RCT (Reactant); RACT (Reactant or reagent)

(precursor; polyoxyalkylene polyammonium polysiloxane compds. for fabric softeners combined with detergents in laundering)

IT 106-58-1DP, N,N'-Dimethylpiperazine, ionene derivs. with adducts of polyethylene glycol monoallyl ether chloroacetate and

dimethylsilyl-terminated polydimethylsiloxane
 109-01-3DP, N-Methylpiperazine, reaction products with
 epoxy-terminated polydimethylsiloxane, salts with triethylene
 glycol monomethyl ether chloroacetate 110-85-0DP, Piperazine,
 reaction products with epoxy-terminated polydimethylsiloxane,
 salts with triethylene glycol monomethyl ether chloroacetate
 31900-57-9DP, Dimethylsilanediol homopolymer,
 dimethylsilyl-terminated, reaction products with polyethylene glycol
 monoallyl ether chloroacetate, ionene derivs. 115254-29-0DP,
 Dimethylsilanediol homopolymer, sru dimethylsilyl-terminated, reaction
 products with polyethylene glycol monoallyl ether chloroacetate, ionene
 derivs. 130167-23-6DP, reaction products with
 methylpiperazine, salts with triethylene glycol monomethyl ether
 chloroacetate
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
 engineered material use); BIOL (Biological study); PREP (Preparation);
 USES (Uses)
 (polyoxyalkylene polyammonium polysiloxane compds.
 for fabric softeners combined with detergents in laundering)

RN 106-58-1 HCAPLUS
 CN Piperazine, 1,4-dimethyl- (CA INDEX NAME)



RN 109-01-3 HCAPLUS
 CN Piperazine, 1-methyl- (CA INDEX NAME)



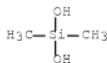
RN 110-85-0 HCAPLUS
 CN Piperazine (CA INDEX NAME)



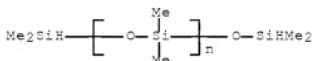
RN 31900-57-9 HCAPLUS
 CN Silanediol, 1,1-dimethyl-, homopolymer (CA INDEX NAME)

CM 1

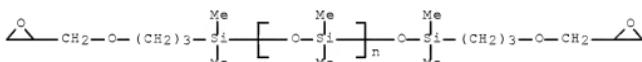
CRN 1066-42-8
 CMF C2 H8 O2 Si



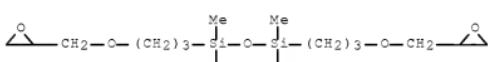
RN 115254-29-0 HCPLUS
 CN Poly[oxy(dimethylsilylene)], α -(dimethylsilyl)- ω -(dimethylsilyl)oxy- (CA INDEX NAME)



RN 130167-23-6 HCPLUS
 CN Poly[oxy(dimethylsilylene)], α -[dimethyl[3-(2-oxiranylmethoxy)propyl]silyl]- ω -[[dimethyl[3-(2-oxiranylmethoxy)propyl]silyl]oxy]- (CA INDEX NAME)



IT 126-80-7P
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation);
 USES (Uses)
 (precursor; polyoxyalkylene polyammonium polysiloxane
 compds. for fabric softeners combined with detergents in laundering)
 RN 126-80-7 HCPLUS
 CN Disiloxane, 1,1,3,3-tetramethyl-1,3-bis[3-(2-oxiranylmethoxy)propyl]- (CA INDEX NAME)



IT 109-01-3, N-Methylpiperazine
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (precursor; polyoxyalkylene polyammonium polysiloxane
 compds. for fabric softeners combined with detergents in laundering)
 RN 109-01-3 HCPLUS
 CN Piperazine, 1-methyl- (CA INDEX NAME)



OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:107428 HCAPLUS Full-text

DN 136:151978

TI Mono- or polyquaternary ammonium polysiloxanes

IN Lange, Horst; Wagner, Roland; Witossek, Anita; Stachulla, Karl-Heinz; Teuber, Siegfried; Kropfgans, Martin; Sockel, Karl-Heinz; Firstenberg, Don

PA GE Bayer Silicones GmbH & Co. KG, Germany

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002010256	A1	20020207	WO 2001-EP8698	20010727 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU	2001091686	A	20020213	AU 2001-91686	20010727 <--
EP	1309648	A1	20030514	EP 2001-971791	20010727 <--
EP	1309648	B1	20060920		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP	2004521967	T	20040722	JP 2002-515983	20010727 <--
AT	340210	T	20061015	AT 2001-971791	20010727 <--
US	2009076238	A1	20090319	US 2008-333730	20081024 <--
PRAI	DE 2000-10036524	A	20000727	<--	
	WO 2001-EP8698	W	20010727	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The title compds., with specified structures, are useful in hair preps.

Refluxing 0.1 mol 3-[3-(glycidyloxy)propyl]-1,1,1,3,5,5,5-heptamethyltrisiloxane with 0.1 mol N-methylpiperazine in iso-PrOH for 7 h gave a 1:1 adduct which was refluxed (50 mmol) with 50 mmol 3-(heptapropyltrisiloxane-3-yl)-2-propenyl chloroacetate in 2-pentanone for 6 h to give the 1:1 quaternary ammonium salt. Hair-care formulations of the products are listed.

IC ICM C09G0677-46

ICS A61K007-48; D06M0015-647

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 62

ST quaternary ammonium deriv polysiloxane; hair care polysiloxane quaternary ammonium; methylpiperazine adduct glycidyloxypropyltrisiloxane; trisiloxanylallyl chloroacetate quaternary salt; allyl chloroacetate prepn reaction

IT Fibers
 RL: MSC (Miscellaneous)
 (preparation of siloxane quaternary ammonium derivs. for finishing of textile fibers)

IT Textiles
 (preparation of siloxane quaternary ammonium derivs. for finishing of textiles)

IT Waterproofing agents
 (preparation of siloxane quaternary ammonium derivs. for use as waterproofing agents)

IT Detergents
 (preparation of siloxane quaternary ammonium derivs. for use in detergents)

IT Hair preparations
 (preparation of siloxane quaternary ammonium derivs. for use in hair care products)

IT Surfactants
 (preparation of siloxane quaternary ammonium derivs. for use in surfactants)

IT Skin
 (preps.; preparation of siloxane quaternary ammonium derivs. for use in skin care products)

IT Polysiloxanes, preparation
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (quaternary ammonium derivs.; preparation for use in hair care products)

IT Quaternary ammonium compounds, preparation
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (siloxane derivs.; preparation for use in hair care products)

IT 394220-50-9P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with (heptamethyltrisiloxanyl)allyl chloroacetate)

IT 2916-14-5P, Allyl chloroacetate
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with heptamethyltrisiloxane)

IT 106-78-5P, Diethylene glycol bis(chloroacetate) 394220-51-0P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with trisiloxane piperazine derivs.)

IT 106-92-3DP, Allyl glycidyl ether, reaction products with hydrosiloxanes, quaternary ammonium derivs.
 2878-14-0DP, Methylallylamine, reaction products with siloxane derivs., quaternary salts 26755-51-1DP, Propargyl chloroacetate, reaction products with hydrosiloxanes, quaternary ammonium derivs. 31900-57-9DP,
 Dimethylsilanediol homopolymer, (glycidyloxy)propyl derivs., reaction products with methylpiperazine 40987-35-7DP, reaction products with siloxane derivs., quaternary salts 52349-43-6DP,
 Vinylcyclohexene oxide, reaction products with hydrosiloxanes,

quaternary ammonium derivs. 62886-12-8DP, Allyl 3-chloropropionate, reaction products with hydrosiloxanes, quaternary ammonium derivs. 63128-00-7DP, reaction products with hydrosiloxanes, quaternary ammonium derivs. 394220-52-1P 394220-53-2P
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation for use in hair care products)

IT 109-01-3, N-Methylpiperazine
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with [(glycidyloxy)propyl]heptamethyltrisiloxane)

IT 1873-86-7, 1,1,1,3,5,5,5-Heptamethyltrisiloxane
 RL: RCT (Reactant); PACT (Reactant or reagent)
 (reaction with allyl chloroacetate)

IT 7420-52-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with methylpiperazine)

IT 2678-14-0DP, Methylallylamine, reaction products with siloxane derivs., quaternary salts 31900-57-9DP, Dimethylsilanediol homopolymer, (glycidyloxy)propyl derivs., reaction products with methylpiperazine
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation for use in hair care products)

RN 2878-14-0 HCPLUS

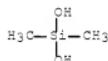
CN 2-Propen-1-amine, 2-methyl- (9CI) (CA INDEX NAME)



RN 31900-57-9 HCPLUS
 CN Silanediol, 1,1-dimethyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 1066-42-8
 CMF C2 H8 O2 Si



IT 109-01-3, N-Methylpiperazine
 RL: RCT (Reactant); PACT (Reactant or reagent)
 (reaction with [(glycidyloxy)propyl]heptamethyltrisiloxane)

RN 109-01-3 HCPLUS

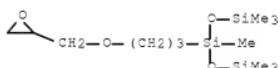
CN Piperazine, 1-methyl- (CA INDEX NAME)



IT 1873-88-7, 1,1,1,3,5,5,5-Heptamethyltrisiloxane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with allyl chloroacetate)
 RN 1873-88-7 HCPLUS
 CN Trisiloxane, 1,1,1,3,5,5,5-heptamethyl- (CA INDEX NAME)



IT 7422-52-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with methylpiperazine)
 RN 7422-52-8 HCPLUS
 CN Trisiloxane, 1,1,1,3,5,5,5-heptamethyl-3-[3-(2-oxiranylmethoxy)propyl]-
 (CA INDEX NAME)



OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 14 OF 23 HCPLUS COPYRIGHT 2009 ACS on STN
 AN 2000:687986 HCPLUS Full-text
 DN 133:267571
 TI Zwitterionic siloxane polymers and ionically cross-linked polymers formed
 therefrom
 IN Gormley, John L.; Berger, Abe; Post, Dennis L.
 PA Mona Industries, Inc., USA
 SO U.S., 15 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

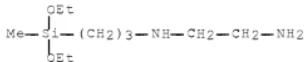
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	09 6124490	A	20000926	09 1999-427216	19991026 <--
CA	2387498	A1	20010503	CA 2000-2387498	20001026 <--
WO	2001030886	A2	20010503	WO 2000-US41558	20001026 <--
WO	2001030886	A3	20010913		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,				

HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 BR 2000015226 A 20020716 BR 2000-15226 20001026 <--
 EP 1224239 A2 20020724 EP 2000-988510 20001026 <--
 EP 1224239 B1 20030521
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL
 TR 200201064 T2 20020923 TR 2002-1064 20001026 <--
 JP 2003513129 T 20030408 JP 2001-533881 20001026 <--
 AT 240989 T 20030615 AT 2000-988510 20001026 <--
 NZ 518366 A 20040130 NZ 2000-518366 20001026 <--
 ES 2199890 T3 20040301 ES 2000-988510 20001026 <--
 AU 774151 B2 20040617 AU 2001-24714 20001026 <--
 CN 1206281 C 20050615 CN 2000-814530 20001026 <--
 IL 149196 A 20070724 IL 2000-149196 20001026 <--
 MX 2002003918 A 20041206 MX 2002-3918 20020418 <--
 IN 2002CN00563 A 20070309 IN 2002-CN563 20020418 <--
 PRAI US 1999-427216 A 19991026 <--
 WO 2000-US11558 W 20001026 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

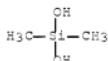
AB Ionically cross-linked silicone polymers of a thickened gel-like consistency are made by reacting a diamino containing polysiloxane with an acid containing reactant selected from itaconic acid or the ester derivative thereof; substituted or unsubstituted cyclic and anhydride; substituted or unsubstituted conjugated olefinic acid or mixts. of the same at an elevated temperature in the presence of a low mol. weight silicone oil or other solvent until an ionically cross-linked zwitterionic siloxane polymer of a gel-like consistency is formed.
 IC ICM C07F0007-10
 INCL 556425000
 CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 62
 IT 79-10-7DP, Acrylic acid, reaction products with aminosiloxanes
 97-65-4DP, Itaconic acid, reaction products with aminosiloxanes
 25377-73-5DP, Dodecetyl succinic anhydride, reaction products with aminosiloxanes 28777-98-2DP, Octadecenyl succinic anhydride, reaction products with aminosiloxanes 297143-62-5DP,
 [(Aminoethyl)amino]propylmethyldiethoxysilane-dimethylsilanediol copolymer, reaction products with anhydrides or acids
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (zwitterionic siloxane polymers and ionically cross-linked polymers formed therefrom)
 IT 297143-62-5DP, [(Aminoethyl)amino]propylmethyldiethoxysilane-dimethylsilanediol copolymer, reaction products with anhydrides or acids
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (zwitterionic siloxane polymers and ionically cross-linked polymers formed therefrom)
 RN 297143-62-5 HCAPLUS
 CN Silanediol, dimethyl-, polymer with
 N-[3-(diethoxymethylsilyl)propyl]-1,2-ethanediamine (9CI) (CA INDEX NAME)

CRN 70240-34-5
 CMF C10 H26 N2 O2 Si



CM 2

CRN 1066-42-8
 CMF C2 H8 O2 Si



OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
 RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 15 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 1999:135320 HCAPLUS Full-text
 DN 130:342735
 TI Synergy between silicones and quaternary compounds for clear and mild
 conditioning shampoos
 AU Marchiorotto, Sabrina; Blakely, Janet
 CS Personal Care Europe, Dow Corning, Brussels, Belg.
 SO Pollena: *Ituszcze, Srodki Piorace, Kosmetyki* (1998), 42(8),
 303-312
 CODEN: PTSKDF; ISSN: 0208-8711
 PB Bointe Centre
 DT Journal; General Review
 LA Polish
 AB A study of ingredients used in hair products showed that silicones are used in
 79% of 2-in-1 shampoos and 33% of normal shampoos (USA News Cosmetic Research
 1996, Dow Corning internal anal., unpublished results), indicating that
 silicones are helping to achieve the desired product attributes. Silicones
 exist as a wide range of versatile polymers. A review with 26 refs. By
 varying their functionalities and/or mol. wts., they can act as light
 conditioning additives for healthy hair or as strong conditioning agents for
 damaged hair. The aim of this paper is to demonstrate the unique synergistic
 effect on hair conditioning of a class of silicones called the Silicone
 Polyethers, when combined with quaternary polymers. In addition, the
 flexibility of this range of silicones in meeting addnl. desirable benefits
 such as a mildness and foam boosting, and in formulating crystal-clear
 shampoos will be demonstrated. As shown in this paper, Dow Corning does not
 only provides silicones for specific applications but also suitable data to
 allow the substantiation of claims, as required by the 6th Amendment (European
 Cosmetic Directive No 76/768/EEC). To facilitate this, various test methods

have been developed inhouse to measure attributes such as foam quality, ease of wet combining, antistatic, behavior and feel of hair.

CC 62-0 (Essential Oils and Cosmetics)

ST review shampoo quaternary compd synergy silicone

IT Shampoos
(conditioning; synergy between silicones and quaternary compds. for clear and mild conditioning shampoos)

IT Polysiloxanes, biological studies
Polysiloxanes, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
(polyether-; synergy between silicones and quaternary compds. for clear and mild conditioning shampoos)

IT Polyethers, biological studies
Polyethers, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
(siloxane-; synergy between silicones and quaternary compds. for clear and mild conditioning shampoos)

IT Quaternary ammonium compounds, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
(synergy between silicones and quaternary compds. for clear and mild conditioning shampoos)

L80 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 1993:479819 HCAPLUS Full-text
DN 119:79819
OREF 119:14183a,14186a
TI Hair cosmetics containing quaternary ammonium salts
and/or amine salts and silicones
IN Horinishi, Nobutaka; Yahagi, Kazuyuki
PA Kao Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 05070327	A	19930323	JP 1991-230253	19910910 <--
JP 3043481	B2	20000522		
PRAI JP 1991-230253		19910910 <--		
OS MARPAT 119:79819				
AB Hair cosmetics contain $[R1NR2R3R4]+X-$ (R1 = straight-chain saturated or branched C8-28 alkyl; R2 = C8-22 alkyl or alkenyl; R3, R4 = Cl-4 alkyl, H; R3 = R4 ≠ H; X = halo, Cl-4 alkyl sulfate) and silicones chosen from di-Me polysiloxane, Me Ph polysiloxane, amino-modified silicone, fatty acid-modified polysiloxane, alc.-modified silicone, aliphatic alc.-modified polysiloxane, polyether-modified silicone, epoxy-modified silicone, F-modified silicone, cyclosilicone, and alkyl-modified silicone. The cosmetics show hair-smoothing and -softening effects. Fine Oxocel 180N [2-(3-methylhexyl)-7-methyl-1-decanol] was treated with Cu-Zn-Ru catalyst (preparation given) and MeNH2 gas at 190° to give 93% N-[2-(3-methylhexyl)-7-methyl-1-decyl]-N-methylamine,				

which was treated similarly with Kalcohl 20 (n-dodecyl alc.) for .apprx.6 h to give 90% N-[2-(3-methylhexyl)-7-methyl-1-decyl]-N-dodecyl-N-methylamine (I). I, iso-Pr alc., Na2CO3, H2O, and MeCl were kept at 100° for .apprx.8 h to give 71% N-[2-(3-methylhexyl)-7-methyl-1-decyl]-N-dodecyl-N,N- dimethylammonium chloride (II). Hair rinse composition containing II, stearyltrimethylammonium chloride, polyether-modified silicone, cetyl alc., propylene glycol, and H2O was formulated.

IC ICM A61K0007-06

CC 62-3 (Essential Oils and Cosmetics)

ST hair quaternary ammonium amine silicone

IT Cyclosiloxanes

RL: BIOL (Biological study)
(hair cosmetics containing quaternary ammonium salts
and/or amine salts and)

IT Quaternary ammonium compounds, biological studies

RL: BIOL (Biological study)
(hair cosmetics containing silicones and)

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)
(Me Ph, hair cosmetics containing quaternary ammonium
salts and/or amine salts and)

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)
(alkyl, hair cosmetics containing quaternary ammonium
salts and/or amine salts and)

IT Alcohols, compounds

Fatty acids, compounds

RL: BIOL (Biological study)
(compsd., siloxanes modified with, hair cosmetics containing
quaternary ammonium salts and/or amine salts and)

IT Hair preparations

(conditioners, containing quaternary ammonium salts
and/or amine salts and silicones)

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)
(di-Me, hair cosmetics containing quaternary ammonium
salts and/or amine salts and)

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)
(epoxy, hair cosmetics containing quaternary ammonium
salts and/or amine salts and)

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)
(fluoro, hair cosmetics containing quaternary ammonium
salts and/or amine salts and)

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)
(polylther-, hair cosmetics containing quaternary
ammonium salts and/or amine salts and)

IT Epoxy resins, biological studies

RL: BIOL (Biological study)
(siloxane-, hair cosmetics containing quaternary
ammonium salts and/or amine salts and)

IT 147553-62-6

RL: BIOL (Biological study)
(hair cosmetics containing silicones and)

IT 145412-26-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and condensation of, with dodecyl alc.)

IT 149098-41-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with Me chloride)

IT 146064-62-2P

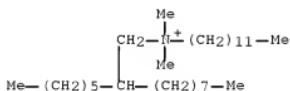
RL: PREP (Preparation)

(preparation of, hair cosmetics containing silicones and)
 IT 147553-62-6

RL: BIOL (Biological study)

(hair cosmetics containing silicones and)
 RN 147553-62-6 HCPLUS

CN 1-Dodecanaminium, N-(2-hexyldecyl)-N,N-dimethyl-, chloride (1:1) (CA INDEX NAME)



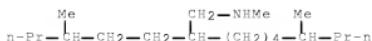
● c1-

IT 145412-26-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and condensation of, with dodecyl alc.)

RN 145412-26-6 HCPLUS

CN 1-Decanamine, N,7-dimethyl-2-(3-methylhexyl)- (CA INDEX NAME)



IT 149098-41-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with Me chloride)

RN 149098-41-9 HCPLUS

CN 1-Decanamine, N,N,7-trimethyl-2-(3-methylhexyl)- (CA INDEX NAME)

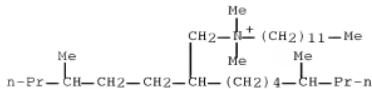


IT 146064-62-2P

RL: PREP (Preparation)

(preparation of, hair cosmetics containing silicones and)
 RN 146064-62-2 HCPLUS

CN 1-Dodecanaminium, N,N-dimethyl-N-[7-methyl-2-(3-methylhexyl)decyl]-, chloride (1:1) (CA INDEX NAME)



● c1-

L80 ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 1993:479815 HCAPLUS Full-text

DN 119:79815

OREF 119:14179a,14182a

TI Hair preparations containing cationic surfactants

IN Yahagi, Kazuyuki; Tashiro, Kazuhiro; Koyama, Takashi; Eshita, Yoshiyuki; Ohtomo, Tsuyoshi; Sazanami, Fumiko; Kamegai, Jun

PA Kao Corp., Japan

SO Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 538762	A1	19930428	EP 1992-117828	19921019 <--
	EP 538762	B1	19960410		
	R: DE, FR, GB				
	JP 05112435	A	19930507	JP 1991-274007	19911022 <--
	JP 05221833	A	19930831	JP 1992-25357	19920212 <--
	US 5714136	A	19980203	US 1995-384802	19950206 <--
PRAI	JP 1991-274007	A	19911022	<--	
	JP 1992-25357	A	19920212	<--	
	US 1992-362921	B1	19921019	<--	
	US 1994-208188	B1	19940310	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Hair preps. containing a cationic surfactant, a fat and/or an oil, and an alkyl saccharide surfactant give a good smoothness and an oil-free feel to the hair. For example, a hair rinse contained stearyltrimethylammonium chloride 1, cetostearyl alc. 4, C12-alkyl saccharide 0.4, propylene glycol 3%, and water balance.

IC ICM A61K007-08

ICS A61K007-06

CC 62-3 (Essential Oils and Cosmetics)

IT Oligosaccharides

RL: PREP (Preparation)

(alkyl ethers, hair preps. containing quaternary ammonium compds. and, conditioning)

IT Fats and Glyceridic oils

Lanolin

Paraffin oils

RL: BIOL (Biological study)

(hair preps. containing quaternary ammonium compds. and alkyl saccharides and, conditioning)

IT Hair preparations

(quaternary ammonium compds. and fats and alkyl saccharides in)

IT Alcohols, biological studies
 RL: BIOL (Biological study)
 (C16-18, hair preps. containing quaternary ammonium
 compds. and alkyl saccharides and, conditioning)

IT Quaternary ammonium compounds, biological studies
 RL: BIOL (Biological study)
 (C16-18-alkyltrimethyl, chlorides, hair preps. containing, conditioning)

IT Siloxanes and Silicones, biological studies
 RL: PREP (Preparation)
 (amino-containing, hair preps. containing quaternary
 ammonium compds. and alkyl saccharides and, conditioning)

IT Siloxanes and Silicones, biological studies
 RL: PREP (Preparation)
 (di-Me, hair preps. containing quaternary ammonium
 compds. and alkyl saccharides and, conditioning)

IT Siloxanes and Silicones, biological studies
 RL: PREP (Preparation)
 (polyether-, hair preps. containing quaternary
 ammonium compds. and alkyl saccharides and, conditioning)

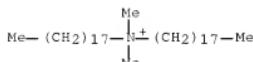
IT 57-55-6, Propylene glycol, biological studies 111-01-3, Squalane
 112-72-1, Myristyl alcohol 112-92-5, Stearyl alcohol 5333-42-6,
 2-Octyldodecanol 25496-72-4, Oleic acid monoglyceride 26657-96-5,
 Palmitic acid monoglyceride 30399-84-9, Isostearic acid 36653-82-4,
 Cetanol 87244-72-2, SH 3775C 143711-48-2, SM8702C
 RL: BIOL (Biological study)
 (hair preps. containing quaternary ammonium compds.
 and alkyl saccharides and, conditioning)

IT 107-64-2, Distearyldimethylammonium chloride 112-03-8
 , Stearyltrimethylammonium chloride 1812-53-9,
 Dicetyltrimethylammonium chloride 17301-53-0,
 Behenyltrimethylammonium chloride 62281-01-0
 103807-16-5, 2-Hexyldodecyltrimethylammonium chloride
 103807-18-7, 2-Dodecylhexadecyltrimethylammonium chloride
 RL: BIOL (Biological study)
 (hair preps. containing, conditioning)

IT 107-64-2, Distearyldimethylammonium chloride 112-03-8
 , Stearyltrimethylammonium chloride 1812-53-9,
 Dicetyltrimethylammonium chloride 17301-53-0,
 Behenyltrimethylammonium chloride 62281-01-0
 103807-16-5, 2-Hexyldodecyltrimethylammonium chloride
 103807-18-7, 2-Dodecylhexadecyltrimethylammonium chloride
 RL: BIOL (Biological study)
 (hair preps. containing, conditioning)

RN 107-64-2 HCPLUS

CN 1-Octadecanaminium, N,N-dimethyl-N-octadecyl-, chloride (1:1) (CA INDEX
 NAME)



● Cl-

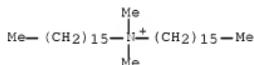
RN 112-03-8 HCPLUS

CN 1-Octadecanaminium, N,N,N-trimethyl-, chloride (1:1) (CA INDEX NAME)



● Cl^-

RN 1812-53-9 HCPLUS
 CN 1-Hexadecanaminium, N-hexadecyl-N,N-dimethyl-, chloride (1:1) (CA INDEX NAME)



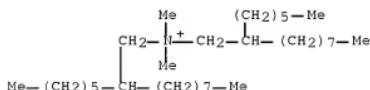
● Cl^-

RN 17301-53-0 HCPLUS
 CN 1-Docosanaminium, N,N,N-trimethyl-, chloride (1:1) (CA INDEX NAME)



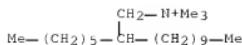
● Cl^-

RN 62281-01-0 HCPLUS
 CN 1-Decanaminium, 2-hexyl-N-(2-hexyldecyl)-N,N-dimethyl-, chloride (1:1)
 (CA INDEX NAME)



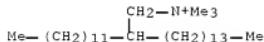
● Cl^-

RN 103807-16-5 HCPLUS
 CN 1-Dodecanaminium, 2-hexyl-N,N-trimethyl-, chloride (1:1) (CA INDEX NAME)



● C1-

RN 103807-18-7 HCPLUS
 CN 1-Hexadecanaminium, 2-dodecyl-N,N,N-trimethyl-, chloride (1:1) (CA INDEX
 NAME)



● C1-

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L80 ANSWER 18 OF 23 HCPLUS COPYRIGHT 2009 ACS on STN
 AN 1993:434091 HCPLUS Full-text

DN 119:34091

OREF 119:6143a,6146a

TI Hair rinse compositions containing quaternary ammonium salts, silicoles, and polyethers

IN Ooshima, Tatsuo

PA Kanebo Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 05058856	A	19930309	JP 1991-244419	19910828 <--
JP 2960587	B2	19991006		
PRAI JP 1991-244419		19910828	<--	

OS MARPAT 119:34091

AB Hair rinse compns. with good conditioning effect contain (1) $[\text{RINCR3R4}]^+ \text{X}^-$ (1 or 2 of R1-R4 = C12-24 alkyl, and the others = C1-3 alkyl, PhCH₂; X = halo) 0.3-5, (2) R6R52S10|S1P520|nS1P52R7 [R5 = Me, Ph (290% R5 = Me); R6, R7 = Me, OH; R6 = R7 ≠ OH] 1-6, and (3) diglycerin-propylene oxide (5-15 mol) adduct 0.1-3 weight%. Octadecyltrimethylammonium chloride 1.0, di-Me siloxane 1.0, polyether-modified silicone 1.0, hexadecyl alc. 2.5, liquid paraffin 0.5, glycerin monoctadecanoate 1.5, propylene glycol 5.0, and H₂O to 100 weight% were mixed to give a hair rinse.

IC ICM A61K0007-08

CC 62-3 (Essential Oils and Cosmetics)

ST hair rinse quaternary ammonium silicone

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)

(hair rinses containing quaternary ammonium salts and
 diglycerin polyoxypropylene ether and)

IT Quaternary ammonium compounds, biological studies

RL: BIOL (Biological study)

(hair rinses containing silicones and diglycerin polyoxypropylene ether and)

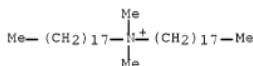
IT Hair preparations
 (rinses, containing quaternary ammonium salts and silicones and diglycerin polyoxypropylene ether)

IT 61710-63-2, Diglycerin polyoxypropylene ether
 RL: BIOL (Biological study)
 (hair rinses containing quaternary ammonium salts and silicones and)

IT 107-64-2, Dimethyldioctadecylammonium chloride
 112-03-8, Octadecyltrimethylammonium chloride 17301-53-0
 , Docosyltrimethylammonium chloride
 RL: BIOL (Biological study)
 (hair rinses containing silicones and diglycerin polyoxypropylene ether and)

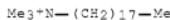
IT 107-64-2, Dimethyldioctadecylammonium chloride
 112-03-8, Octadecyltrimethylammonium chloride 17301-53-0
 , Docosyltrimethylammonium chloride
 RL: BIOL (Biological study)
 (hair rinses containing silicones and diglycerin polyoxypropylene ether and)

RN 107-64-2 HCPLUS
 CN 1-Octadecanaminium, N,N-dimethyl-N-octadecyl-, chloride (1:1) (CA INDEX NAME)



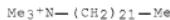
● Cl⁻

RN 112-03-8 HCPLUS
 CN 1-Octadecanaminium, N,N,N-trimethyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

RN 17301-53-0 HCPLUS
 CN 1-Docosanaminium, N,N,N-trimethyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

L80 ANSWER 19 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 1993:344086 HCAPLUS Full-text
 DN 119:34086
 OREF 119:6143a,6146a

TI Shampoo compositions containing quaternary ammonium salts and silicones

IN Matsuo, Takashi; Yahagi, Kazuyuki
 PA Kao Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05043433	A	19930223	JP 1991-199018	19910808 <--
PRAI JP 1991-199018		19910808		<--
OS MARPAT 119:34086				

AB Shampoo compns. which are not irritating to the skin and show good foaming and conditioning properties, contain (i) quaternary ammonium salts having secondary or tertiary amino group and aliphatic chain (and ether, ester, or acyl group) and (ii) silicones, C13H27CONH(CH₂)₂N(CH₂CH₂OH)CH₂CH(OH)CH₂N+Me₃ Cl- 15, 2-dodecylhexadecyltrimethylammonium chloride 1, polyoxyethylene lauryl glucoside 5, KF 96 (di-Me siloxane) 0.5, xanthan gum 0.3, Na benzoate 0.3, perfume, colorant, and H₂O to 100 weight% were mixed to give a shampoo.

IC ICM A61K0007-075

CC 62-3 (Essential Oils and Cosmetics)

ST Shampoo quaternary ammonium salt silicone

IT Shampoos

(quaternary ammonium salts and silicones in, with
 good conditioning effect)

IT Quaternary ammonium compounds, biological studies

RL: BIOL (Biological study)

(shampoos containing silicones and, with good conditioning effect)

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)

(di-Me, shampoos containing quaternary ammonium salts
 and, with good conditioning effect)

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)

(polyether-, shampoos containing quaternary
 ammonium salts and, KF 352A, with good conditioning effect)

IT 143711-48-2, SM 8702C

RL: BIOL (Biological study)

(shampoos containing quaternary ammonium salts and,
 with good conditioning effect)

L80 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1993:240468 HCAPLUS Full-text

DN 118:240468

OREF 118:4153a,41536a

TI Hair rinse compositions containing quaternary ammonium salts, silicones, and polyether-modified silicones

IN Ooshima, Tatsuo

PA Kanebo Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

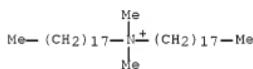
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 05058857	A	19930309	JP 1991-244420	19910828 <--
PRAI JP 1991-244420		19910828	<--	
OS MARPAT 118:240468				
AB Hair rinse compns. with good conditioning effect contain (i) $\{R1NR2P3R4\} + X$ - (1 or 2 of R1-R4 = C12-24 alkyl; the others = C1-3 alkyl, PhCH ₂ ; X = halo) 0.3-5, (ii) $R6R2SiO\{SiR5OjnSiR5P6$ [R5 = Me, Ph (290% R5 = Me); R6 = Me, OH] 0.1-2, and (iii) polyether-modified silicones 0.1-2 weight%. Octadecyltrimethylammonium chloride 1.0, di-Me siloxane 1.0, polyoxypropylene diglyceryl ether 1.5, hexadecyl alc. 2.5, liquid paraffin 0.5, glycerin monoctadecanoate 1.5, propylene glycol 5.0, and H ₂ O to 100 weight% were mixed to give a hair rinse.				
IC ICM A61K0007-08				
CC 62-3 (Essential Oils and Cosmetics)				
ST hair rinse quaternary ammonium silicone				
IT Quaternary ammonium compounds, biological studies				
Siloxanes and Silicones, biological studies				
RL: BIOL (Biological study)				
(hair rinses containing)				
IT Siloxanes and Silicones, biological studies				
RL: BIOL (Biological study)				
(polyether-, hair rinses containing)				
IT Hair preparations				
(rinses, containing quaternary ammonium salts and silicones and polyether-modified silicones, with good conditioning effect)				
IT 107-64-2, Dimethylidioctadecylammonium chloride 112-03-8, Octadecyltrimethylammonium chloride 17301-53-0 , Docosyltrimethylammonium chloride				
RL: BIOL (Biological study)				
(hair rinses containing)				
IT 107-64-2, Dimethylidioctadecylammonium chloride 112-03-8, Octadecyltrimethylammonium chloride 17301-53-0 , Docosyltrimethylammonium chloride				
RL: BIOL (Biological study)				
(hair rinses containing)				
RN 107-64-2 HCPLUS				
CN 1-Octadecanaminium, N,N-dimethyl-N-octadecyl-, chloride (1:1) (CA INDEX NAME)				



● Cl-

RN 112-03-8 HCPLUS
 CN 1-Octadecanaminium, N,N,N-trimethyl-, chloride (1:1) (CA INDEX NAME)

Me₃N—(CH₂)₁₇—Me

● cl-

RN 17301-53-0 HCAPLUS
 CN 1-Docosanaminium, N,N,N-trimethyl-, chloride (1:1) (CA INDEX NAME)

Me₃N—(CH₂)₂₁—Me

● cl-

L80 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 1991:478988 HCAPLUS Full-text

DN 115:78988

OREF 115:13479a,13482a

TI Germicidal elastomers

IN Feilman, Jack H.

PA Epitope, Inc., USA

SO PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9009013	A2	19900809	WO 1990-US377	19900125 <--
	WO 9009013	A3	19910418		
	W: AU, BB, BG, BR, CA, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
	US 5326841	A	19940705	US 1989-370683	19890623 <--
	AU 9051565	A	19900824	AU 1990-51565	19900125 <--
PRAI	US 1989-301039	A	19890125	<--	
	US 1989-370683	A	19890623	<--	
	WO 1990-US377	A	19900125	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Disclosed is an elastomeric article comprising the crosslinked polymerized product of (a) a quaternary ammonium compound N+R₄X- (21 R = unsatd. alkyl, remainder are alkyl or aryl; X = halo, small anion) with (b) a free radical copolymerizable compound. The elastomers can be used to manufacture germicidal barriers. Thus, a condom was formed from polyisoprene and N,N,N-trimethyl-N-oleylammonium iodide, which was then dipped into I₂ solution to form germicidal complexes.

IC G08F0226-00; C08G0063-68; C08G0069-26; A61L0029-00; A61K0031-785

ICS @@@@--@--; C08G0063-68; C08G0077-54; A61L0031-00;
A61K0031-785

CC 63-8 (Pharmaceuticals)

Section cross-reference(s): 37, 38

IT Contraceptives

(condoms, germicidal, iodine complexes with quaternary

ammonium group-containing polymers for)

IT Siloxanes and Silicones, compounds
 RL: BIOL (Biological study)
 (di-Me, reaction products, with unsatd. quaternary ammonium halides, for manufacture of germicidal medical goods)

IT Medical goods
 (face masks, germicidal, iodine complexes with quaternary ammonium group-containing polymers for)

IT Polyethers, biological studies
 RL: BIOL (Biological study)
 (quaternary ammonium group-containing, germicidal medical goods manufacture with)

IT Rubber, natural, compounds
 RL: BIOL (Biological study)
 (reaction products, with unsatd. quaternary ammonium halides, as germicidal elastomers)

IT Quaternary ammonium compounds, polymers
 RL: BIOL (Biological study)
 (unsatd., polymers, germicidal medical goods manufacture with)

IT 36496-07-8DP, polymers with siloxanes, iodine complexes
 117488-76-3DP, polymers with natural rubber, iodine complexes
 RL: PREP (Preparation)
 (preparation of, for condom)

IT 117488-76-3DP, polymers with natural rubber, iodine complexes
 RL: PREP (Preparation)
 (preparation of, for condom)

RN 117488-76-3 HCAPLUS

CN 9-Octadecen-1-aminium, N,N,N-trimethyl-, iodide, (9Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● I-

L80 ANSWER 22 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN
 AN 1991:45553 HCAPLUS Full-text
 DN 114:45553
 OREF 114:7897a,7900a
 TI Concentrated fabric softeners
 IN Yamamura, Masaaki; Inokoshi, Junichi; Onishi, Motoko
 PA Kao Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 021911774	A	19900727	JP 1989-6275	19890113 <--
PRAI	JP 1989-6275		19890113 <--		
AB	The title softeners comprise quaternary ammonium salts and silicone derivs-(I) containing ≥50% polyoxyethylene groups and having mol. weight (Mw) 5000-				

2,000,000, and have good storage stability. Thus, a fabric softener composition containing 15% bis(hydrogenated tallow-alkyl)dimethylammonium chloride and 1% I (containing 70% polyoxyethylene groups; Mw 101 + 104) exhibited viscosity 182, 180, and 185 cP after storage for 20 days at -10°, room temperature, and 50°, resp.

IC ICM D06M0015-647

ICS D06M0013-46

CC 46-5 (Surface Active Agents and Detergents)

ST quaternary ammonium compd fabric softener; silicone

contg fabric softener; storage stability fabric softener

IT Quaternary ammonium compounds, uses and miscellaneous

RL: USES (Uses)

(fabric softeners, containing polyether-modified siloxanes, concentrated, with good storage stability)

IT Softening agents

(for fabrics, concentrated, quaternary ammonium compds. containing polyether-modified siloxanes as)

IT Quaternary ammonium compounds, uses and miscellaneous

RL: USES (Uses)

(bis(hydrogenated tallow alkyl)dimethyl, chlorides, fabric softeners, containing polyether-modified siloxanes, concentrated, with good storage stability)

IT Siloxanes and Silicones, uses and miscellaneous

RL: USES (Uses)

(polyether-, fabric softeners, containing quaternary ammonium compds., concentrated, with good storage stability)

IT Polyethers, uses and miscellaneous

RL: USES (Uses)

(siloxane-, fabric softeners, containing quaternary ammonium compds., concentrated, with good storage stability)

IT 25322-68-3D, ethers with siloxanes

RL: USES (Uses)

(fabric softeners, containing quaternary ammonium compds., concentrated, with good storage stability)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L80 ANSWER 23 OF 23 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1990:62341 HCAPLUS Full-text

DN 112:62341

OREF 112:10575a,10578a

TI Organo modified polydimethylsiloxanes in hair preparations

AU Sacklowski, Helga

CS Th. Goldschmidt A.-G., Fed. Rep. Ger.

SO Seifen, Oele, Fette, Wachse (1989), 115(17), 607-12

CODEN: SOFWAF; ISSN: 0173-5500

DT Journal

LA German

AB The adsorption of modified polydimethylsiloxanes from formulated conditioners and conditioning shampoos by human hair was studied by Fourier-transform IR spectroscopy and an acid-dye technique (photometry). Compds. investigate were a silicon polyether (Abil B 88183, I), a silicone betaine (Abil B 9950, II), and silicone- quaternary ammonium polymers (Abil-Quat 3270 and 3272, III and IV, resp.). Good substantivity properties were observed for II, III, and IV, but I, lacking in quaternary ammonium function, was only loosely bound. Pos. influences on combining properties were observed for III and IV in friction measurements in a wool model; IV was superior due to its longer polydimethylsiloxane chains compared to III. Typical product formulations are also given.

CC 62-3 (Essential Oils and Cosmetics)

ST polydimethylsiloxane adsorption hair shampoo

conditioner; siloxane adsorption hair shampoo
conditioner

IT Quaternary ammonium compounds, biological studies
RL: BIOL (Biological study)
(di-Me siloxanes containing, adsorption of, by human hair,
structure and shampoo and conditioner formulations in
relation to)

IT Adsorption
(of polydimethylsiloxanes, on human hair, quaternary
ammonium function in, shampoo and conditioner
formulations in relation to)

IT Hair preparations
(conditioners, dimethylsiloxanes for, substantivity of,
quaternary ammonium function in)

IT Shampoos
(conditioning, dimethylsiloxanes for, substantivity of,
quaternary ammonium function in)

IT Siloxanes and Silicones, biological studies
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(di-Me, adsorption of, by human hair, structure and shampoo
and conditioner formulations in relation to)

IT Siloxanes and Silicones
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(di-Me, 3-[3-[(3-coco amidopropyl)dimethylammonio]-2-
hydroxypropoxy]propyl group-terminated, acetates (salts), Abil-Quat
3270, adsorption of, by human hair, structure and shampoo and
conditioner formulations in relation to)

IT Siloxanes and Silicones
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(di-Me, 3-[3-[(3-coco amidopropyl)dimethylammonio]-2-
hydroxypropoxy]propyl group-terminated, acetates (salts), Abil-Quat
3272, adsorption of, by human hair, structure and shampoo and
conditioner formulations in relation to)

IT Siloxanes and Silicones, biological studies
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(polyether-, adsorption of, by human hair, structure and
shampoo and conditioner formulations in relation to)

IT Hair preparations
(rinses, dimethylsiloxanes for, substantivity of,
quaternary ammonium function in)

IT Polyethers, biological studies
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(siloxane-, adsorption of, by human hair, structure and
shampoo and conditioner formulations in relation to)

IT 102523-96-6, Abil B 9950
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(adsorption of, by human hair, structure and shampoo and
conditioner formulations in relation to)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

=> => d bib abs hitind hitstr

L83 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:1019949 HCAPLUS Full-text
DN 142:7376
TI Polyorganosiloxane compositions for the treatment of substrates
IN Wagner, Roland; Roos, Christopher; Kropfgans,
Martin; Schneizing, Albert
PA GE Bayer Silicones GmbH & Co. KG, Germany

SO PCT Int. Appl., 111 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004101684	A1	20041125	WO 2004-EP50797	20040513 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2540317	A1	20041125	CA 2004-2540317	20040513 <--
	EP 1625180	A1	20060215	EP 2004-741569	20040513 <--
	EP 1625180	B1	20060920		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	BR 2004010310	A	20060523	BR 2004-10310	20040513 <--
	CN 1823135	A	20060823	CN 2004-80020420	20040513 <--
	CN 100384940	C	20080430		
	AT 340224	T	20061015	AT 2004-741569	20040513 <--
	JP 2007504344	T	20070301	JP 2006-530191	20040513 <--
	US 20060237155	A1	20061026	US 2005-556124	20051109 <--
	MX 2005012221	A	20060210	MX 2005-12221	20051111 <--
PRAI DE	2003-10321558	A	20030514	<--	
	WO 2004-EP50797	W	20040513	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Softeners for treatment paper and paper products, synthetic or natural fibers or/and textiles with partial hydrophilizing consist of 0.05 - 90% of structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes (such as I and II), 0 - 30% of silicon-free surfactants (usually non-polymerizable quaternary ammonium compds. or nonionic emulsifiers), 0 - 0.5% of biocides, 0 - 10% of flowing agent, 0 - 5% of usual additives and auxiliaries and 0 - 99.95% of a support material (usually water or water-soluble solvents). A typical softener prepared by emulsifying a mixture containing 40% of a mixture of I an II (in ratio 3:1) and 23.7% of a nonionic surfactant (Renex 36) in water and mixing with an aqueous solution of acetic acid and sodium acetate was sprayed onto a paper surface and provided paper with softness and hydrophilic properties.

IC C08L0083-04

ICS C09G0077-54

CC 37-6 (Plastics Manufacture and Processing)

ST softener paper synthetic natural fiber hydrophilizing agent; amino polysiloxane quaternary ammonium
 polysiloxane paper fiber softener; silicon free surfactant paper
 fiber softener

IT Alcohols, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (C11-14, ethoxylated, Renex 36, Renex 30, nonionic surfactant; softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT Polysiloxanes, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyamine-polyether-, ionomers; softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT Ionomers
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyamine-polyether-polysiloxanes; softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT Polyethers, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyamine-polysiloxane-, ionomers; softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT Polyamines
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyether-polysiloxane-, ionomers; softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT Biocides
 Paper
 Plasticizers
 (softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT Polysiloxanes, preparation
 Quaternary ammonium compounds, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT 297143-62-5DP, methyl- trimethyisiloxyl-terminated 798569-79-6P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (actual and assumed monomers; softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT 106-78-5P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (polysiloxanes precursor; softeners for treatment paper and

paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT 107-51-7DP, Dimethylbis(trimethylsiloxy)silane, reaction products with aminopolysiloxanes 699340-85-4P
740815-32-1P 798569-77-4P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT 79-04-9, Chloroacetic acid chloride 111-45-6, Diethylene glycol, reactions
RL: PCT (Reactant); PACT (Reactant or reagent) (softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

IT 297143-62-5DP, methyl- trimethyisiloxy-terminated 798569-79-6P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (actual and assumed monomers; softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

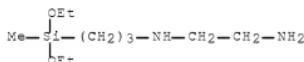
RN 297143-62-5 HCPLUS

CN Silanediol, dimethyl-, polymer with N-[3-(diethoxymethylsilyl)propyl]-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 70240-34-5

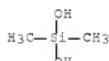
CMF C10 H26 N2 O2 Si



CM 2

CRN 1066-42-8

CMF C2 H8 O2 Si



RN 798569-79-6 HCPLUS

CN Silanediol, dimethyl-, polymer with N-[3-(diethoxymethylsilyl)propyl]-1,2-ethanediamine, methyloxirane,

methylsilanediol and oxirane, butyl ether, graft (9CI) (CA INDEX NAME)

CM 1

CRN 71-36-3

CMF C4 H10 O



CM 2

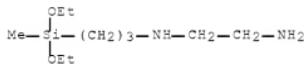
CRN 798569-78-5

CMF (C10 H26 N2 O2 Si . C3 H6 O . C2 H8 O2 Si . C2 H4 O . C H6 O2 Si)x
CCI PMS

CM 3

CRN 70240-34-5

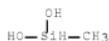
CMF C10 H26 N2 O2 Si



CM 4

CRN 43641-90-3

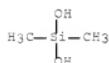
CMF C H6 O2 Si



CM 5

CRN 1066-42-8

CMF C2 H8 O2 Si



CM 6

CRN 75-56-9
CMF C3 H6 O

CM 7

CRN 75-21-8
CMF C2 H4 OIT 106-78-5^V

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); FACT (Reactant or reagent)
 (polysiloxanes precursor; softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

RN 106-78-5 HCPLUS

CN Acetic acid, 2-chloro-, 1,1'-(oxydi-2,1-ethanediyl) ester (CA INDEX NAME)

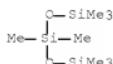


IT 107-51-7^{DP}, Dimethylbis(trimethylsiloxy)silane,
 reaction products with aminopolysiloxanes 609340-85-4^P
 740815-32-1^P 798569-77-4^P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (softeners for treatment paper and paper products from structurally different amino polysiloxanes or/and quaternary ammonium polysiloxanes and silicon-free surfactants)

RN 107-51-7 HCPLUS

CN Trisiloxane, 1,1,1,3,3,5,5,5-octamethyl- (CA INDEX NAME)



RN 609340-85-4 HCAPLUS

CN Dodecanoic acid, compd. with α -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- ω -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]oxylpoly[oxy(dimethylsilylene)] polymer with methyloxirane polymer with oxirane bis(2-aminopropyl) ether and N,N,N',N'-tetramethyl-1,6-hexanediamine acetate (9CI) (CA INDEX NAME)

CM 1

CRN 143-07-7

CMF C12 H24 O2



CM 2

CRN 64-19-7

CMF C2 H4 O2



CM 3

CRN 398137-95-6

CMF (C10 H24 N2 . C3 H9 N O . 1/2 (C3 H6 O . C2 H4 O)x . (C2 H6 O Si)n C16 H34 O5 Si2)x

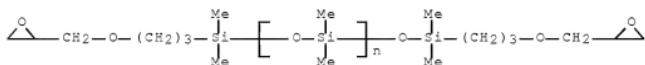
CCI PMS

CM 4

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS



CM 5

CRN 111-18-2

CMF C10 H24 N2

Me₂N—(CH₂)₆—NMe₂

CM 6

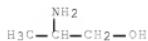
CRN 65605-36-9

CMF C3 H9 N O . 1/2 (C3 H6 O . C2 H4 O)x

CM 7

CRN 6168-72-5

CMF C3 H9 N O



CM 8

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 9

CRN 75-56-9

CMF C3 H6 O



CM 10

CRN 75-21-8

CMF C2 H4 O



RN 740815-32-1 HCPLUS

CN Acetic acid, chloro-, oxydi-2,1-ethanediyl ester, polymer with α -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- ω -[(dimethyl[3-(oxiranylmethoxy)propyl]silyl)oxy]poly[oxy(dimethylsilylene)] and N,N,N',N'-tetramethyl-1,6-hexanediamine, dodecanoate (salt) (9CI) (CA INDEX NAME)

CM 1

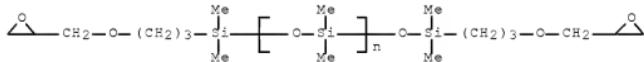
CRN 143-07-7
CMF C12 H24 O2

HO2C—(CH2)10—NO

CM 2

CRN 398133-61-4
CMF (C10 H24 N2 . C8 H12 C12 O5 . (C2 H6 O Si)n C16 H34 O5 Si2)x
CCI PMS

CM 3

CRN 130167-23-6
CMF (C2 H6 O Si)n C16 H34 O5 Si2
CCI PMS

CM 4

CRN 111-18-2
CMF C10 H24 N2

Me2N—(CH2)6—NMe2

CM 5

CRN 106-78-5
CMF C8 H12 C12 O5

RN 798569-77-4 HCPLUS

CN 1,6-Hexanediamine, N,N,N',N'-tetramethyl-, polymer with
 α -(dimethyl[3-(oxiranylmethoxy)propyl]silyl)- ω -(dimethyl[3-(oxiranylmethoxy)propyl]silyloxy)poly[oxy(dimethylsilylene)],
 α -hydro- ω -(2-aminomethylethoxy)poly[oxy(methyl-1,2-

ethanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), and methyloxirane polymer with oxirane bis(2-aminopropyl) ether, acetate dodecanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 143-07-7
CMF C12 H24 O2



CM 2

CRN 64-19-7
CMF C2 H4 O2

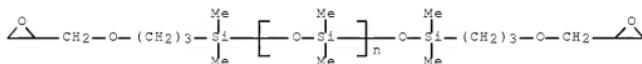


CM 3

CRN 798569-76-3
CMF (C10 H24 N2 . C3 H9 N O . (C3 H6 O)n (C3 H6 O)n (C3 H6 O)n C15 H35 N3 O3 . 1/2 (C3 H6 O . C2 H4 O)x . (C2 H6 O Si)n C16 H34 O5 Si2)x
CCI PMS

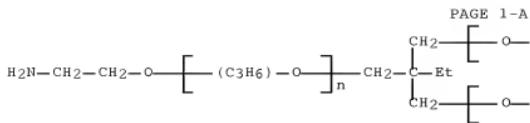
CM 4

CRN 130167-23-6
CMF (C2 H6 O Si)n C16 H34 O5 Si2
CCI PMS

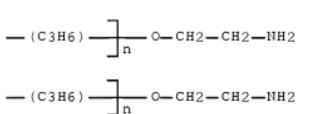


CM 5

CRN 39423-51-3
CMF (C3 H6 O)n (C3 H6 O)n (C3 H6 O)n C15 H35 N3 O3
CCI IDS, PMS



3 (D1-Me)



PAGE 1-B

CM 6

CRN 111-18-2
CMF C10 H24 N2

$$\text{Me}_2\text{N}-\langle\text{CH}_2\rangle_6-\text{NMe}_2$$

CM 7

CRN 65605-36-9
CME C3 H9 N 0 , 1/2 (C3 H6 O , C2 H4 O)x

CM 8

CRN 6168-72-5
CMF C3 H9 N 0



CM 9

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 10

CRN 75-56-9
CMF C3 H6 O



CM 11

CRN 75-21-8
CMF C2 H4 O



IT 79-04-9, Chloroacetic acid chloride 111-46-6,
Diethylene glycol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(softeners for treatment paper and paper products from structurally
different amino polysiloxanes or/and quaternary
ammonium polysiloxanes and silicon-free surfactants)

RN 79-04-9 HCPLUS

CN Acetyl chloride, 2-chloro- (CA INDEX NAME)



RN 111-46-6 HCPLUS
CN Ethanol, 2,2'-oxybis- (CA INDEX NAME)



OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 08:23:07 ON 08 SEP 2009)
SET COST OFF

FILE 'HCPLUS' ENTERED AT 08:23:24 ON 08 SEP 2009
L1 1 S US20060237155/PN OR (US2006-556124# OR WO2004-EP50797 OR DE20
E WAGNER/AU
L2 25 S E3

E WAGNER R/AU
 L3 2091 S E3-E33
 E WAGNER ROLAND/AU
 L4 201 S E3-E5
 E ROOS/AU
 L5 10 S E3
 E ROOS C/AU
 L6 195 S E3-E12, E19, E30-E33
 E KROPPGANS/AU
 L7 26 S E8, E9
 E SCHNERING/AU
 L8 4 S E4
 E GE BAYER/CO
 L9 87 S E4-E10/CO, PA, CS
 E E10+ALL
 L10 80 S E3-E5/CO, PA, CS
 E E2+ALL
 L11 87 S (GE (L) BAYER)/CO, PA, CS
 E MOM PERF/CO
 E MOMENT PERF/CO
 L12 336 S E7, E9-E21/CO, PA, CS
 E E16+ALL
 L13 312 S E2+RT OR E2-E6/PA, CS
 L14 1 S L1 AND L2-L13
 L15 225 S POLYSILOXANE?/CW, CT (L) (POLYAMINE? OR QUAT? AMINE?)
 L16 313 S POLYSILOXANES+OLD, NT/CT (L) (POLYAMINE? OR QUAT? AMINE?)
 L17 292 S POLYSILOXANES+NT/CT (L) (POLYAMINE? OR QUAT? AMINE?)
 L18 149 S C08G077-54/IC, ICM, ICS, ICA, ICI
 L19 517 S L15-L18
 L20 204 S POLYAMINE?/CW, CT (L) POLYSILOXAN?
 L21 99 S POLYAMINE?/CW, CT (L) SILOXAN?
 L22 585 S L19-L21
 L23 1960 S POLYSILOXANE?/CW, CT AND QUATERNARY AMMONIUM?/CT
 L24 2850 S POLYSILOXANES+OLD, NT/CT AND QUATERNARY AMMONIUM?/CT
 L25 314 S L22-L24 AND POLYETHER?/CW, CT
 L26 413 S L22-L24 AND POLYETHER?
 L27 13 S L22-L24 AND C08G077-46/IC, ICM, ICS
 L28 425 S L25-L27
 L29 24 S L28 AND PY<=2004 NOT P/DT
 L30 3 S L29 AND SHAMPOO
 L31 253 S L28 AND (PD<=20040513 OR PRD<=20040513 OR AD<=20040513) NOT L
 L32 177 S L31 AND (POLYIMIDE OR POLYESTER OR POLYSULFONE OR POLYUREA OR
 L33 76 S L31 NOT L32
 L34 27 S L33 NOT POLYSILOXANE?/CW, CT
 L35 2 S L34 NOT SILOXANE?/CW, CT
 L36 25 S L34 NOT L35
 L37 23 S L36 NOT PHENOL
 L38 21 S L37 NOT PHOSPHONIUM
 L39 19 S L38 NOT CARBOXYLIC?/CW, CT
 L40 16 S L39 NOT ETHOXYLATED
 L41 15 S L40 NOT ALKOXYLATED
 L42 14 S L41 NOT (PEPTIDES OR POLYPEPTIDE)
 L43 12 S L42 NOT POLYETHYLENE GLYCOL
 L44 9 S L43 NOT ME PH
 L45 8 S L44 NOT FUEL?/SC, SX
 L46 4 S L45 NOT (CONCRETE OR ZIRCONOXANE OR POLYSULFIDE OR CARBOXY)
 L47 21 S L36 NOT L46
 L48 3 S L47 AND (119:79819 OR 119:34091 OR 118:240468)/DN
 L49 49 S L33 NOT L34

L50 48 S L49 NOT SILAZANE
 L51 44 S L50 NOT SILSESQUIOXANE
 L52 3 S L51 AND (142:7376 OR 140:408668 OR 136:151978)/DN
 L53 2880 S L1-L14
 L54 24 S L53 AND L22-L24
 L55 9 S L54 AND L28
 L56 17 S L54 AND (PD<=20040513 OR PRD<=20040513 OR AD<=20040513)
 SEL DN AN 1 3 5 7 10 11 13 14
 L57 8 S L56 AND E1-E24
 L58 7 S L54,L55 NOT L56
 L59 19 S L1,L14,L30,L46,L48,L52,L57
 L60 19 S L59 AND L1-L59
 L61 19 S L60 AND (?SILOX? OR ?QUAT? ?AMMON? OR POLYETHER? OR POLYAMIN?
 SEL RN

FILE 'REGISTRY' ENTERED AT 10:20:21 ON 08 SEP 2009
 L62 115 S E25-E139
 L63 63 S L62 AND N/ELS
 L64 42 S L63 NOT SI/ELS
 L65 21 S L63 NOT L64
 L66 15 S L65 AND PMS/CI
 L67 10 S L66 NOT C2H40
 L68 11 S L65 NOT L67
 L69 12 S L62 AND SI/ELS NOT L63
 L70 10 S L69 NOT (C12H27CLO4SI3 OR C8H24O4SI4)
 L71 37 S L64 NOT PMS/CI
 L72 31 S L71 NOT (C3H7NO2 OR C10H16N2O8 OR C7H15NO2 OR C21H44N2O OR C6

FILE 'HCAPLUS' ENTERED AT 10:28:50 ON 08 SEP 2009
 L73 3 S L67 AND L61
 L74 5 S L67 NOT L73
 L75 5 S L74 AND (PD<=20040513 OR PRD<=20040513 OR AD<=20040513)
 L76 4 S L61 AND L70 AND L72
 L77 7 S L61 AND L70
 L78 11 S L61 NOT L73,L75,L76,L77
 L79 6 S L78 AND L72
 L80 23 S L73-L79

FILE 'HCAPLUS' ENTERED AT 10:44:00 ON 08 SEP 2009
 L81 1 S L1 AND L80
 SEL RN

FILE 'REGISTRY' ENTERED AT 10:44:39 ON 08 SEP 2009
 L82 9 S E140-E148

FILE 'HCAPLUS' ENTERED AT 10:44:46 ON 08 SEP 2009
 L83 1 S L81 AND L82

=>